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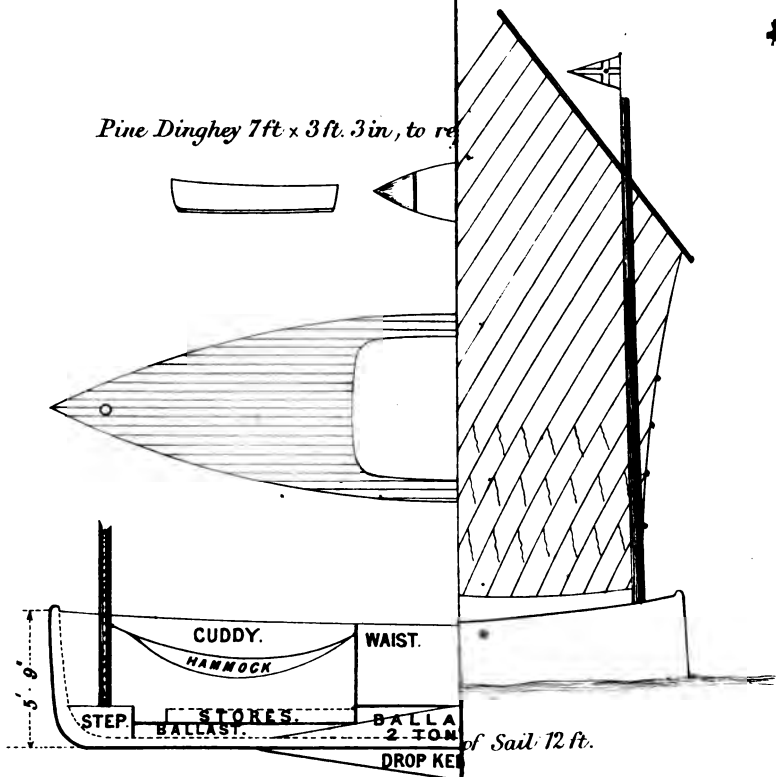








*Pine Dinghey 7 ft x 3 ft. 3 in., to re*



*Length 28 ft. 6 in. Bread*

AN  
EXPERIMENTAL CRUISE,  
SINGLE HANDED,  
IN THE  
'PROCYON,' 7-TON LUGGER.

BY  
R. T. McMULLEN,  
*Author of 'DOWN CHANNEL,' 'ORION,' ETC.*



LONDON:  
EDWARD STANFORD, 55, CHARING CROSS, S.W.  
AND  
CHARLES WILSON, 157, LEADENHALL STREET, E.C.

1880.



203. f. 698.





# AN EXPERIMENTAL CRUISE IN THE 'PROCYON.'

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## CHAPTER I.

To render the little cruise in the 'Procyon' as comfortable as possible, it will be seen that I borrowed several useful articles from the 'Orion,'—which must be somewhat puzzling to those who are under the impression she has passed out of my hands, and, in our joint interests, makes the following explanation desirable.

In April 1878 I heard that a gentleman living at the Isle of Wight had purchased an old yacht called the 'Fox,' and purposed altering the name to 'Orion.' Before the alteration was made, believing it arose from ignorance of another *yawl* of that name being in existence, I wrote to state that I had called my vessel 'Orion' for several years, and pointed out the annoyance it might occasion to himself, as well as to me, if one were mistaken for the other,—particularly as I had published books on my cruises; and I hoped that fact, alone, would determine him to make another choice before the decision was irrevocable. The reply was to the effect that when he had seen the book called 'Orion' he would consider it and let

me know. Hearing that further steps had been taken to register her in London under that name, I wrote again, in the hope that the gentleman might think it right to change his mind even at the last moment:

“DEAR SIR,—When I built my vessel, twelve years ago, I chose the name of ‘Orion’ because there was no other of that name in the yacht list,—a course that gentlemen who name their own vessels are, for their own sake, generally careful to pursue. When I mentioned the book, &c., it was in the belief that you supposed you had found an unappropriated name, and that motives of delicacy would induce you to alter your decision, and abstain from adopting a name that has for years past been intimately associated with my own, &c., &c.—I am, dear Sir, yours faithfully.”

I am aware that no law was transgressed in disguising the ‘Fox’ under the name of ‘Orion’; and that if it pleased me to do so, I might change the name of my yawl to ‘Vanessa,’ or ‘Sunshine’—or even to that of one of the royal yachts—and the name of the lugger to ‘Rob Roy,’ ‘Kate,’ or ‘Silver Cloud,’ under the plea that none of them were precisely of the same rig or tonnage as the ‘Orion’ or the ‘Procyon,’ and therefore ought not to be mistaken for them. But, much as I might desire to appropriate the name of any of these well-known craft—apart from the question of unpleasantness to present owners—I should think, with the heavens and the earth to choose from, it was a weak thing to do. However, if

I would, a far deeper ground of objection to altering the names of my vessels is my own frequently expressed opinion, that destroying the identity of old vessels is open to as severe a construction as changing the names of horses ; and that, in the absence of a satisfactory explanation, I am quite unable to see, when the original name is unobjectionable, how doing so can be otherwise than open to severe comment.

Few people are correct judges of tonnage unless they see two or more vessels together, of which the tonnage of one is known. The precise tonnage of the 'Orion' is  $19\frac{1}{2}$ , but rather high bulwarks and exceptionally heavy spars have generally caused her to be estimated at 30 ; and upon occasions, at sea, very practised hands I could name have mistaken her for a yacht of still higher tonnage. For the reasons before mentioned, in the absence of the re-christened vessel, it could not be agreeable to me to have it supposed I was sailing in an old craft under a new name ; and the fact that last year I received a letter from a yachting friend at Plymouth saying he had seen the arrival of the yawl 'Orion' announced under the name of a fresh owner, shows that the inconvenience is not imaginary. The new measurement, or registered tonnage of the 'Orion' is 13, and that of the 'Orion' (late 'Fox') 23.

I have heard the wish expressed that gentlemen would more frequently publish their experiences. But, although we are an insular people, I warn those who may think of doing so, that outside the amateur

sailing world it is not easy to interest readers in books which, if genuine and possessing the slightest claim to utility, must necessarily be somewhat technical. Voyages like Dufferin's and Lamont's to the Arctic regions, and Brassey's 'Round the World,' made with powerful vessels and large crews, rank with books of travel, and have no more affinity with the class of books to which I am referring, than Burnaby's 'Ride to Khiva' has with a treatise on hunting. Moreover, their well-known names, and the fact of being accompanied by many witnesses, is in great measure a guarantee for the truth of what they write, engendering confidence; without which, personal narratives, unless *avowedly* written for 'Boys' own Books,' are not worth reading.

On our modest scale of adventure, to appeal successfully to a wider circle, I have been told that it is necessary to pursue a course known as "poet's" or "artist's license," and, avoiding technicalities, trespass upon the region of the extremely sensational. In a poem, such a course is not incompatible with honesty of purpose; but, however it may appear to succeed with the unthinking for the moment, I am convinced that in prose, where an intention to mislead must be apparent to many at first sight, it is not only calculated to defeat itself in the end, but, unfortunately, tends to discredit as a body all who are engaged in the pursuit of one of the most elevating and harmless pastimes in the world.

A variety of cruises by amateurs having come under my notice, I feel warranted in asserting that

this is seldom, if ever, done by men of experience; but by those to whose position mine would be parallel, if, never having ridden off the "tan," and making a silly boast of the fact, I bought a pony for a season's hunting, and, because my neck was not broken, professing to have exhausted the art in one lesson, forthwith wrote a treatise upon a subject with which no one but myself would suppose I could be otherwise than most unfamiliar.

Naturally enough, to me brooks would be *rivers*,—hurdles, *fences*—hedges nothing less than *bullfinches*. Coupled with solemn warnings to avoid *chalk-pits*, *limekilns*, *lakes*, and *navigable rivers*, by a liberal use of the little words *perhaps*, *might*, and *if*—which add nothing to fact while they suggest much to the imagination—hunting would be shown to be a pastime fit only for men of desperate courage and inexhaustible resource; and a host of dangers conjured up or implied of which veteran sportsmen had hitherto been in blissful ignorance. Having in the book professed to contemplate the meeting of these dangers with delight, and to have "enjoyed immensely" every narrow escape, I should probably consider my instructive mission ended, and return to the "tan"; convinced that no amount of troublesome practice could bring anyone nearer to perfection than that. Besides, if I appeared again on the field, in spite of humble protests, the honour might be thrust upon me of leading the way across the first wide ditch well charged with duckweed, an awkward dilemma—for which, after all, inexperience, rather

than cowardice, might be to blame—in which my hair, struggling beneath the cap to assume a posture befitting a compliment so embarrassing, would secretly remind me that, though I had written “large,” in truth I had hitherto sought the gates, and otherwise circumvented the chase, as no reasonable neophyte had failed to do before me.

In reply to a remark that one of my books lacked *stirring incident*, I accepted the criticism as just and with the reverse of displeasure. In ‘Down Channel’—of which the above was said—if the reader has sufficient experience of the sea to follow the cruises of boats that were very rarely detained by weather, and, with the exception of once in the 3-ton ‘Leo’ to Lyme Regis, and once in the 11-ton ‘Sirius’ to Bear Haven (Ireland), never “put back,” they will observe that, in keeping well within the facts, there is still abundant evidence of anxious and trying situations for a stranger on the coast; which, if exaggeration and unseamanlike acts—to make them appear more trying than they were—had improved them to the uninitiated, would have rendered them not less distasteful to myself, than ridiculous in the eyes of a class whose judgment I hold in respect.

To give point to my remarks. Where the depth was 10 fathoms, and the boat under a whole sail, I have read of a “sea,” of which the perpendicular crest alone is described as being 20 feet high, and is (*not inappropriately*) termed a “precipice.” In the same book, there is more than one illustration of a sea running, or rather “tumbling” in deep water,

which happily no sailor would recognize; because it is contrary to experience and common sense that any boat could live for an instant in the positions depicted. Prefacing a narrative (favoured on both sides of the Atlantic) by "disclaiming any previous acquaintance with the sea," together with a curious talent for finding that the books of directions and charts are "faulty," however it may tell upon landsmen, is not calculated to impart confidence in the correctness of the writer's impressions amongst seamen; more especially, as "taking observations for latitude in the neighbourhood of lighthouses," "tending *side-lights* at anchor," making unnecessary "signals of distress," and such like vagaries too numerous to quote (which, if true, should be kept secret), render any such declaration superfluous.

In the early part of 1879, some remarks made in America upon 'Down Channel,' chiefly in reference to the supposed instability of small English yachts, and the necessity of their being "hove to" in adverse gales at sea, caused a letter under my signature to appear in 'Forest and Stream,' New York. I explained the method of "heaving-to"—instanced the few cases, during several years, I had judged it right to do so—corrected the notion as to our making leeway in that position—and, in answer to an inquiry where 'Down Channel' could be purchased, stated that it was out of print, but would perhaps be reproduced in an improved form if the demand for such *plain facts* as had come under my observation seemed to warrant it. In allusion to



the sensational writing which seemed to be more in vogue, having referred to some of the extravagant proceedings alluded to above, the letter concluded with the following paragraph:—

“ It stands to reason that cruises of the latter description will be more lively reading ; since the enthusiastic impressions of those who publish after their first thousand miles of sea-sailing are so innocently erroneous in regard to *speed* and technical details, that they have a fund of matter to draw upon for the entertainment of readers which is denied to others, who, hampered with knowledge derived from experience, are bound to be careful in their writings and illustrations not to violate the laws of nature. Moreover, if interested in the encouragement of pleasure cruising at sea, they are equally bound not to gratify the taste of readers for the marvellous at the expense of truth, by depicting a number of exciting and impossible dangers, which may have the effect of deterring others from taking to a sport that would be much encouraged by yachtsmen publishing their experiences—provided they were careful to write only what they knew to be true.”

However numerous—as observation and experience tell me they must be—upon the *natural mistakes* of those who go to sea for amusement and to learn, there is not a word to be said, even if opportunities of doing so were offered. Quoting *verbatim* from the book of ‘Sailing Directions’ what “*might be*,” if, instead of the author’s little boat, a laden collier of 12 feet draught attempted to enter

certain harbours during a gale of wind, is absurdly irrelevant to the circumstances actually presented to the reader. Not less so, in fact, than if in my supposititious book on hunting I quoted the dangerous exploits of Jack Mytton as the inevitable occurrences of a sporting life on shore, and allowed the reader to imagine that I habitually encountered such dangers myself.

If, as frequently hinted, instruction is really intended, more can be conveyed by showing how errors of judgment and accidents arose, and the means of extrication adopted, than in volumes of successful runs with a fair wind.

With a few exceptions of a trifling nature, in two out of three books that have come under my notice, there is not a single instance of a determination to gain a position to windward; and in the other, it seems never to have been attempted by design except in calm weather—if the quantity of canvas carried is a more reliable criterion than the illustrations. But, apart from a determination not to be stopped on a passage by a foul wind, an occasional “thrash to windward” is, above all means of locomotion, the sailor’s delight; without which it is far preferable to spend one’s time in rowing an “out-rigger” or paddling a “canoe.” To be constantly running to leeward is like living on dry bread!

When taking the ‘Procyon’ single-handed to the Isle of Wight in 1873, an untidy cutter of about 9 tons, with four or five hands on board, sailed from Dover shortly before me. While I kept my destina-

tion to myself, and only replied, "For a cruise," these shouted lustily to every inquirer, "Bound to the westward." With a light fair wind they made Dungeness a mile or so ahead of me, and there encountered a beautiful fresh westerly breeze, which soon knocked up a smart little sea. When at five o'clock in the afternoon I had been hammering into it myself for a quarter of an hour, and had passed the "Ness" about a mile—Well! I don't know whether to my surprise or not—but the cutter came "flaring" along with the boom off "square," *Bound to the eastward*, and apparently in a desperate hurry to make it. Deprived of the company I had been led to expect (although I had not spoken to them), I continued beating to windward 34 hours after that, until the anchor was let go off Selsea Bill, 70 miles beyond. As the wind long continued to blow up Channel, I presume they had the satisfaction of lying in Dover Basin and shouting, "Bound to the westward," for many a day after their unnecessary, and therefore somewhat ignominious, retreat.\*

On my arrival at Cowes, a gentleman, whose acquaintance I then made and am pleased to retain, came alongside the 'Procyon.' He was sailing alone in a little decked yacht of 5 tons, specially built for the purpose somewhere above bridge in the Thames, which would have been nice looking if he had had pride in keeping her clean. In conversation he informed me that he never attempted to turn to windward at sea, nor—mentioning names—

\* Repeated from 'Orion,' but told here with a different object.

did any other single-handed sailors he knew of. The fact is, that his boat, like theirs, had length and breadth with very little immersion, consequently was not adapted to sail to windward in rough water.

The reason for making these comments is, that I wish amateurs endued with the national spirit of adventure, and disposed to exercise proper judgment, not to be deterred from seeking health and pleasure on the sea by useless exaggeration of the difficulties to be encountered. If they desire to become proficient in the art of sea-sailing, before undertaking long passages, they should perseveringly practise short ones in strong built, weatherly craft—that is, in boats of not less than 7 feet beam, and 3 or 4 feet draught—and never neglect practicable opportunities of turning to windward. Boats of lighter draught cannot effectually turn to windward in rough water; moreover, the attempt to make them do so, when the forefoot and the rudder are alternately “pitched” out of water, besides the discouraging effect of their necessarily leewardly qualities, is *extremely dangerous*.

The book from which I got my first impressions of seamanship is ‘The Seaman’s Manual,’ by Dana, jun., which treats only of ships, and not of boats. After the first season, passed in the lower reaches of the Thames, I bought charts on the largest scale procurable, and studied them at home along with the book of ‘Sailing Directions.’ Having no convenience in the ‘Leo’ for spreading a chart, I connected all the buoys, beacons, and headlands with dotted lines of

red ink, and marked the bearings so that they could be read off; and—excellent practice for beginners—in some cases, transferred them to parchments on half the scale. When I built the ‘Sirius’ the latter ceased to be necessary; but the preparation and study of all new charts at home has never been omitted, with the result that if after being two or three days from land, and having deviated from the course by reason of head winds, I have been puzzled on making a strange coast, no sooner has one distinguishing feature been recognized and (if necessary) confirmed by cross bearings, than the whole has become so familiar that I have experienced no difficulty in finding and entering natural harbours on the wildest coasts of Scotland and Ireland, even during the night. To sail with comfort and any degree of safety, a previous acquaintance with the charts is indispensable; and if gentlemen desire to render themselves equally independent of pilots, they can do so by the same means.

One of the writers before mentioned, who, I suppose, for ample reasons was assisted out of and into port, thinks a *seaman’s skill* is sufficiently displayed in making the passages; and advises that a pilot should be always engaged to take the boat into harbour. Without for a moment disputing that the writer was the best judge of his own case, in so far as this advice is proffered by way of instruction to others, I entirely disagree with it, and say, that he who cannot take his boat into harbour should confine his sailings to narrow waters.

The only author who leads the reader to believe he was specially qualified for the sea on account of his proficiency in nautical astronomy, takes "cross bearings," and calls them "observations for latitude and longitude." I suppose the youngest sailor afloat knows it is not this sort of knowledge that would obtain for him a certificate from the Board of Trade.

The same person—addressed by two masters of coasters as "Captain," and so styling himself henceforth, "which title he wore all the more readily because it was bestowed by those who ought to know best if he were entitled to it or not,"—in the form of instruction, endorses an opinion expressed by sailors with whom he was in conversation, "That a bad harbour is better than a good roadstead." According to my notion, the truth of this depends upon the quality of the vessel or boat, and upon the capacity of the master. I have always preferred the sea to the risk of entering, or the misery of lying in a bad harbour; consequently I am not in a position to second his endorsement.

Again, he a score of times expresses unbounded confidence in the sea-going qualities of his craft—which, in addition to the security afforded by a wholesome beam of 7 feet 9 inches, had two large air tanks and forty-two empty biscuit tins soldered up "to scatter over the water if she should be cut into splinters by a steamer"—and gives the following advice to amateurs, who, fired by his example, might possibly be induced to attempt a similar adventure: "When there is doubt, or danger, and clearly it

should seem the safest course, then run—run for your life—run back.” As a proof that he lacked not the courage to practise what he preached,—in this way, made pretty clear from the outset—this advice follows immediately upon an account of a run back of 65 miles! although but 10 miles more, with the water smoothening every tack, would have placed him triumphantly in a haven of security; or, at least, have enabled him to bring up on a weather shore until the tide became favourable for entering. This great sacrifice of time and distance was made because the wind headed him unexpectedly, and blew fresh enough for a double-reefed mainsail. Unconsidered, the advice seems good; but in the first place, I object that it is apt to engender too much of the careful spirit which actuated a gallant officer, who, anticipating the attack on a certain position would fail, and that the force would eventually have to retreat, said, “As I feel rather lame to-day, I think I’ll begin at once.” In the second place, even if the boat were not provided with air tanks and biscuit tins against the day of adversity, and were only half as weatherly as the above is represented to have been, if it were really coming on to blow, I am convinced it would be far safer to keep on the wind, and make a slow advance towards the protection of a weather shore, than to run for several hours towards a lee shore, with the probability of being overtaken by thick weather and a terrible sea before getting there. If the vessel could not, or, from want of resolution on the part of

somebody, would not, face the first moderate difficulty, how hopeless must be her position when the lee shore is gained, and the harbour cannot be found? Those who from mere want of experience are disposed to follow his advice, and run to leeward, should do so while the port they have left is still in sight; but if several hours must elapse before it can be regained, as they value their lives, I beseech them to think twice before they do it! To those who, *by nature*, are disposed to follow his advice, I have safer counsel to offer. Rather than go to sea in this spirit—stay at home!

Thousands of valuable lives have been sacrificed in the manner I have indicated, which would have been spared had they courageously faced the deep sea for a few hours. As in the confusion of battle on land, so in collisions at sea, in strandings on the coast, and in small boats under all circumstances of peril, the timorous and the panic-stricken have but a poor chance in comparison with the cool and collected; a fact above all things desirable to keep in remembrance when venturing to sport with so grand and mighty a playmate as the sea, where, when circumstances are critical, nothing is more calculated to bring about a fatal result than a slavish fear of consequences.

It is easy enough, as anyone may perceive for himself on reading more than one of these books to which reference has been made, to make frequent profession of trust in Providence; and I deny not its excellence as an example, if the narrative bears out



the profession. But, probably, few will quarrel with the opinion, that they perhaps do so most who publicly profess it least; and whose spirit of reliance is best expressed by the following appropriate verse from the 56th Psalm *in the Prayer-book*—"Nevertheless, though I am sometime afraid: yet put I my trust in Thee." A verse I commend to those who, without a text before their eyes, cannot remember in whose presence they are, when otherwise alone upon the sea.

That my disagreement on these points is of older date than the "recommendations" I have criticised, is evidenced by the following quotations from 'Down Channel,' published in 1869, after eighteen years' experience; all of which are extracted from the cruises of the 'Leo,' built for me in 1850. Her length was 18 feet, breadth 6 feet 3 inches, draught 4 feet, freeboard (at the quarters) 9 inches, ballast and stores 25 cwt., tonnage  $2\frac{3}{4}$ .

"The *first* sail was as far as Gravesend and back, with a waterman in charge, and this was the only apprenticeship I served."—P. 2. From that day I resolved to dispense with pilotage services, and, with the exception of being once overtaken by a thick fog in the 'Sirius' off Scilly, have rigidly adhered to it.

"After being so badly handled at the first venture,\* I could not get under way or go in amongst the shipping to bring up without having a taste of brimstone in the mouth from excessive anxiety. I envied the bargemen their coolness and evident self-possession, and looked forward to the time when I

\* Nearly lost an eye, and got into a terrible mess at the Nore.

should feel the same confidence. My plan was to persevere in sailing by day and night in all weathers, and never to let want of confidence stand in the way. In this manner, getting into scrapes and getting out of them, I learnt more of practical sailing in a few months than I should have learnt in several years if I had hired a man to take the lead in everything.”  
—P. 11.

“I did not venture again below Hole Haven in Sea Reach until the following year (1851), when I not only visited several times the scene of my former disaster, but ventured to Ramsgate and the South Foreland, with only charts, compasses, and lead for guides. Nothing could have seemed more cross and unlucky than a foul wind all the way out and home, which quite upset my plans, elaborately drawn up on paper, for running from one mark to another, and instead compelled frequent reference to the charts and constant use of the lead. But really nothing could have been more advantageous, though at the time the difficulties seemed insurmountable. Twenty fair-wind passages would have taught me nothing in comparison, so that in the end it was most fortunate.”  
—P. 11.

“Unless well acquainted with the coast, and certain of making a correct land-fall, it is better to face the gale, however small the vessel, than to run for a lee shore. I am convinced that unless a small vessel, especially an open one, can be got into harbour before the sea becomes very heavy, there is more safety in keeping deep water, and in not attempting

to approach the land at all; where, owing to shallow water or currents, the sea will generally be found more dangerous. In the majority of cases when fishing boats are lost they are swallowed up near the shore, and often at the harbour's mouth."—P. 24. (In support of this opinion, two notable instances are given, of fine large luggers foundering with all hands, where decked vessels of twice their draught would probably have crossed the shoals alluded to in safety.)

"*Aug. 21st, 1857, 9 P.M.*—Ran into Bridport Harbour (Dorsetshire), but it was so uncomfortable that we left it again, and moored to a buoy in the roads, preferring to roll outside all night, to being bumped against the pier. Moreover it struck me as being a dangerous place, and very like a mouse-trap in the event of a heavy sea setting in."—P. 26. Thus it appears to have been my opinion then as now, that a good roadstead is infinitely preferable to a bad harbour; but not for a moment do I recommend anyone to adopt my view who is not fully prepared to extricate himself from the danger of being caught at anchor on a lee shore.

"The deep yawned behind, the huge billows rose like hills, and broke," though it sounds like a fearful gale off Scilly, is really the description of a run back under reefed canvas from Herne Bay to Margate, by one who was "mysteriously stricken with lameness, and thought it prudent to begin to retreat at once." Because it has seldom presented itself to my mind anywhere, and never in my recollection within 150

miles of the Thames, in the above terrifying aspect, it by no means follows that I am insensible to the formidable nature of a rough sea, or risk its anger in ignorance.

By the locality, direction of wind, precautions deemed necessary, sail carried, and lastly, by the result, readers who are not entirely ignorant of the sea should be able to form a tolerably correct notion of its violence for themselves. A constant repetition of superlatives, absurdly applied to moderate breezes and protracted gales indiscriminately, simply exhaust imagination at a blow, besides leading, or rather grossly misleading, aspirants to the art of sea-sailing to expect, whenever there is a cloud above the horizon, that the sea will be thrown into a state of perturbation before which they must needs fly in terror.

My opinion has often been asked concerning "weather forecasts."

I think the very reasonable, and avowedly unpretentious daily forecasts issued, along with the weather chart of the previous day, by the Meteorological Department, good as they are, show plainly how impossible it is to see with any degree of certainty even a few hours into futurity. In so far as those which go beyond this are based upon astronomical phenomena, affecting the tides of both hemispheres, I think them important to wharfingers and others whose premises are exposed to inundation from extraordinary spring tides. I believe Saxby was first in the field in this direction, and am glad to see that

his labours are not unrecognized. But if before fixing a day for sowing or reaping, for a garden party or an excursion to Eel Pie Island, all the prophets of Europe and America are consulted, I think it will be difficult to find a day in the year upon which all are agreed that something unpleasant will not happen, especially if people will be so rash as to hoist a sail, or take their pleasure without an umbrella. For this reason, if you are contemplating a voyage on business or a cruise for pleasure, provided you possess a good barometer and moderate experience, I think it will conduce to comfort and expedite business to go to sea first, and consult the prophets on your return.

Although entirely to suppress technicalities might be a convenience to persons who expect to gather the sense of books by simply scanning instead of reading them, to an insular people, dependent upon the maritime world for their prosperity, it would be a poor compliment to employ language in a nautical book suitable only to the intelligence of those who have never seen the sea. The remarkable and widespread interest taken in the numerous inquiries arising out of the 'Princess Alice' catastrophe proved that people other than sailors were quite able to master the nautical terms necessary to a clear understanding of the positions of the ships if they desired, and it is, indeed, quite probable that if the newspapers had substituted for the technicalities employed the more homely phrases of landmen, the latter would not have been far behind others in remarking the absurdity. In this book, as in 'Orion,' I have avoided

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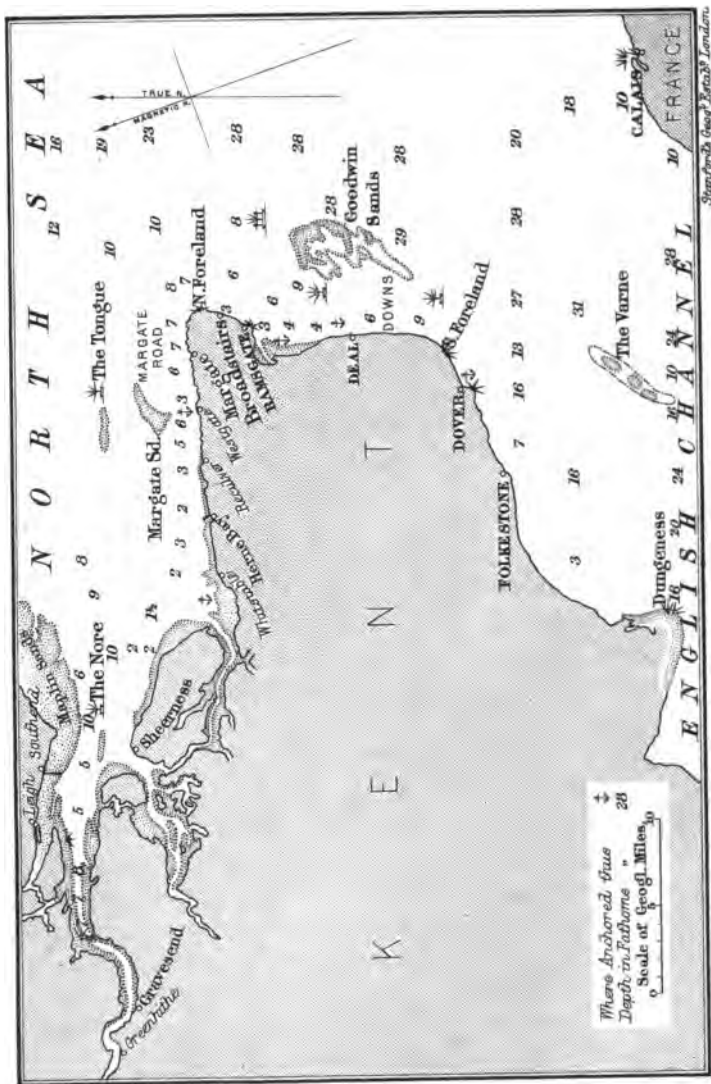
the use of such terms as much as is consistent with care not to render the various positions unintelligible to seamen.

Unfortunately, beyond such very crude efforts as the outline sketches of the boat and her belongings, I am not a draughtsman, or I could explain much with the pencil that has to be explained in words. For the drawings of the larger woodcut and the vignette I am indebted to the kindness of a friend.

## CHAPTER II.

As partly referred to already, in 1873 I sailed this boat single-handed from Greenhithe to the Isle of Wight and Lymington. Upon that occasion I was so destitute of the numerous comforts necessary to render such an arduous undertaking even tolerable that, after a rest of three days at Dover, I beat down Channel against a head wind and rough sea, without seeking shelter in any other port. I was forty hours under way at one time, and then, after a few hours' rest off Selsea Bill, finished up with five hours of doubled-reefed mainsail and three of single; for no other reason than that the living was so unsatisfactory, I desired to "knock it off" as quickly as possible.

Returning, a month later, with one of my men from the 'Orion' in the capacity of a volunteer, we agreed on the passage to make the voyage direct to Greenhithe for the same reason. It occupied three days, during which time the anchor was twice let go at night, once for several hours in a dense fog about five miles south of Shoreham, and once on account of the tide. The last twenty hours' sailing, from the South Foreland to Greenhithe, was done under double-reefed mainsail against head winds and a very rough sea.



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As it was only an intermediate cruise, while the 'Orion' was undergoing alterations at Lymington, and was my first experience of single-handed sailing, the explanation is very simple. Before starting, feeling well and hearty, I foolishly concluded that, provided there was plenty to eat and drink, any rough-and-ready arrangements would be good enough. Two mistakes rendered the passage out a very trying one. I thought a bed in the hammock quite superfluous, and, being unsuspecting of the cause, subjected myself to a severe internal cold every time I turned in. The other prime blunder was taking only a spirit apparatus to boil water, and leaving the stove belonging to the boat at home, simply because I had cooked with it once before, and had hastily condemned the employment as disagreeable, without considering its possible importance and usefulness. As the disorder occasioned by the first mistake rendered cold meals extremely distasteful and unwholesome, it is easy to believe I had a hard time of it. There was, however, great compensation in the satisfactory performance of the boat, which, in spite of personal discomfort, never ceases to be an object of absorbing interest when she is doing well.

The cause of my complaint was not discovered until I reached Cowes, when, having placed a folded pilot coat beneath me in the hammock, I turned out well in the morning for the first time. Whether in undertaking a second cruise in the same boat I profited by the errors of omission in the first will be seen hereafter.

It is possible that the relation of a deliberately-planned trial of this laborious pastime, in which no reasonable opportunity of acquiring or confirming experience was neglected, will not be without use, if it do no more than clear away the haze of romance—due to novices commencing an amateur sea life at the wrong end—which is scarcely ever absent from such published accounts as those to which I have previously referred; a peculiar species of romance which, in the absence of experience to counteract its effect, is certain to prove disappointing, and, if trusted implicitly, is not unlikely to lead the would-be imitator into danger. Only as it tends towards this result can waiting and watching anxiously for a fair wind, and then running from port to port in a life-boat, or in a little boat three parts of whose inventory consists of life-saving apparatus, azimuths, and sextants—of which the latter could by no possibility be required in coasting if the weather were fine, and could not possibly be used if the weather were bad—be considered to come under the head of *serious* adventure. Nor is the character of such adventures really altered, even though every sand-bank passed on the run may be described as the “scene of wrecks,” and the possible grave of the adventurer, and “a text of Scripture,” to counteract these dismal thoughts, be nailed up in the cabin—a species of “charm” which, judging from the narrative, would seem to be very efficacious in harbour, but scarcely to answer the purpose of affixing it there in an adverse wind at sea. One amusing instance of “flashing”

nautical instruments I cannot forbear mentioning. The narrator, after descanting upon the improvidence of going to sea without a sextant, and explaining the use he would make of it if he should be blown out to sea, apparently unconscious of the absurdity, laments further on in the book that he has no *regulated* chronometer, otherwise on a particular day if it had not been cloudy and misty he would have taken an observation! Notwithstanding that, in his then position, amidst the sand-banks of the Thames, the lead must have given more information than a cargo of chronometers and sextants.

That mismanagement, miscalculation, inattention, or unavoidable accident may render any sailing serious, I shall show by the mishaps that overtake more powerful and better found craft than those of which I am speaking. Every practical man is aware that boats of insufficient draught and power to gain a weather shore or port under short canvas, in the event of a sudden storm and shift of wind, and which can neither be trusted to run round a headland before a high sea, nor ride out a breeze at anchor, are exposed to many dangers from which well-found sea boats would be exempt. This renders it inexcusable for anyone acquainted with the risks to encourage inexperienced amateurs in adventures which would frequently be attended with fatal results if they became common. A general practical acquaintance with the coast and outlying dangers, sufficient to navigate in darkness and haze without the assistance of a chart, is only one of the chief necessities of a

trying position that, sooner or later, is certain to overtake a determined single-handed voyager. Charts are seldom available in boats in bad weather by day, much less on dark and stormy nights, when one's attention cannot for a moment be withdrawn from the helm.

For narratives of truly hazardous adventure, such as make those to which I have referred appear ridiculous, we must look to the Americans, who, having discovered that crossing the Atlantic in life-boats, with the risk of starvation, is not sufficiently exciting to extract dollars from the pockets of Europeans, have taken to voyaging in small boats advertised beforehand as *sinkable*, and, to improve their chance of a paying exhibition, have even compelled their wives to accompany them. I say compelled, because the inference is pardonable if erroneous, for the horrors of such a voyage in a boat of less than three tons to a woman unaccustomed to the sea cannot possibly be exaggerated. It is indisputable that owners may punish themselves as they please, but having myself, between 1851 and 1857, sailed several thousand miles at sea in a model yacht of the same dimensions as the last which sailed from America, I am in a position to judge how cruel it must be either to compel or deceitfully persuade human beings of any age or sex to make a long voyage in such a craft. In 1877 one arrived in the Channel to exhibit at the Paris Exhibition, in which the poor woman had been completely prostrated by illness for a fortnight; and in 1879 another woman was rescued from horrible

suffering and certain death by a barque. How, in her agony of mind and body, she must have longed even for a single hour's rest from the ceaseless tossing!

It has sometimes been said I am mad, an impeachment I have hitherto resisted; but now find it convenient to accept with its advantages, of which, to be judged with leniency in respect of any supposed idiosyncrasy by all sensible people, is one; and to be privileged to do and say, without offence, what others credited with a more equable frame of mind may not, is another. Moreover, a candid acknowledgment that palliates, if it does not excuse, the supposed extravagances with which I am occasionally twitted, and which leaves no more to be said on the subject, is an advantage not to be despised. Whatever of waywardness, therefore, seems to attach to my proceedings may be attributed to an infirmity for which I am not responsible, or else to a prescriptive right to please myself—according to the fancy of the reader. For health's sake, and from a natural love of the sea, I began to accustom myself to these voluntarily imposed hardships when yachts were comparatively few, and steamers, from their rarity, were regarded by the crews of sailing vessels with more curiosity than fear; and now, such is the force of habit, that, like the confirmed dram-drinker, I am not able to dispense with my dose of salt water. If occasionally I take it in a concentrated form, it is only what might reasonably be expected, seeing that so far back as

1851, in any weather not absolutely impracticable, I commenced making successful passages to windward at sea in a model yacht of three tons. This experiment eventually led to my taking the same boat to the Land's End and back in 1857, which was several years before any similar boat made the passage down Channel, or Americans thought of bringing life-boats across the Atlantic. On these earlier cruises I was always accompanied by a boy, who had a little fore-castle to himself, with a scuttle by which to enter and through which to stand up and make his toilet in the morning; but no accommodation for an assistant navigator is provided in the 'Procyon.'

I have never recommended single-handed sailing, and will not abuse my new-claimed privilege by doing so now. All I propose is to give a description of the boat and a simple account of the sailing, including preparations for rendering myself independent of all extraneous aid for a month; an independence I intended resolutely to maintain for that period, even against "sea-prowlers" in search of a job, who, before now, have been known to force their unbidden services where they were neither desired nor needed,—a species of piracy in philanthropic guise upon which an exorbitant claim may be founded, that finds no favour with seamen of any class, and is never practised by the respectable "long-shore" men of the coast. If assistance were required I should not hesitate to welcome it, as I have done on previous occasions; but my acquaint-

ance with the boat would be slight if I were not able to judge of its necessity for myself. These remarks arise out of a discussion that was forced upon me by a man belonging to a disappointed lugger's crew, who came out of his way to taunt me in Dover Harbour with having regretted, when it was too late, that I had not accepted their services, and agreed to give them a *trifle* to pilot me into Ramsgate. If he could have heard the congratulations of the bystanders upon my having avoided their interference, and the hostile remarks that were made after he left, he, and his co-philanthropists, would be less ready in future to air grievances based upon mere assumption.

As I had only a month to spare, and it would take nearly that time to prepare the 'Orion' for sea, I resolved to have another sea trial of the 'Procyon.' Borrowing from the former vessel anything I thought likely to contribute to my safety and convenience, I surrounded myself with every comfort that could be rendered available in the limited space afforded by a 7-ton boat.

When all was on board and stowed away, the congestion of lockers, and general block up below, was so nearly complete that the precise whereabouts of many little useful articles belonging to the domestic department became doubtful. However, my memory being sufficiently good to know they were there, it frequently happened that I contentedly submitted to be deprived of them for the time being, knowing that, whenever it suited me to take the trouble,



they could be obtained. If this seems rather "Irish," it is human nature. Anyway, I was satisfied; and there was no one else to complain.

The 'Procyon' was built for me in 1867, and lengthened 5 feet by the stern in 1870, by Messrs. Holloway, of Whitstable. The sails are by Messrs. Laphorn, of Gosport. The entire expense was 217*l.*, and I have always done them the justice to admit that the substantial nature of the work was commensurate with the cost, and supported their high local reputation for honest and finished workmanship. Her length is 28½ feet, extreme breadth 7¾ feet, and average depth inside 5 feet. Draught, aft 3 feet, forward 2 feet. Her height as she stands on the ground with a 6-inch keel is 5 feet 10 inches forward and 5 feet 2 inches aft. The extra height forward, which answers its purpose completely, is to counteract the effect of placing the mast so near the stem. The height of the "cuddy" is 4 feet from the floor to the deck beams, and its length is 12 feet. On each side there is a low bench fitted up as a locker, which might be rendered available for sleeping bunks; but I prefer to swing a hammock between the mast and the mainbeam.

The space under the after deck, which is 5 feet long, is protected from the weather by a bulkhead and doors. Fitted up with capacious shelves and leeboards, the stowage here is considerable; even the space under the floor and down to the deadwood being utilized for articles not liable to injury by water.

She has what is technically called a "centre-board," but which, on account of its moderate dimensions, I prefer to call an auxiliary keel, since its drop below the main keel is but from nothing forward to 18 inches aft, or an average drop of 9 inches for its length of 10 feet. It is of  $\frac{3}{8}$  sheet iron and weighs 2 cwt. The advantage I claim for this form of drop keel is, that it is so powerfully held by the main keel (6 inches deep) that there is but little chance of its being twisted or damaged by accidental contact with the ground. Rocks or sand simply force it up; but if when sailing fast you have the misfortune to encounter a bank of stiff clay, there is a chance of being held until the tide rises; in the meanwhile, if there is any motion, it acts as an awkward lever to strain the garboard seams, as would any other which did not bend or break off. The keel case being under the waist platform, and considerably below the waterline, is of course entirely closed and caulked, excepting the shaft for the lifting chain which ascends through the main thwart. Into this shaft the pump discharges its rusty water, instead of on to the deck or over the side. On each side of the keel case—which we have hitherto thought sufficiently protected from the strain—the iron ballast, amounting to two tons, is stowed; so that all these awkward things are out of sight excepting the shaft and the pump. Truly, she is a jolly boat, and a model of strength; but recent experience has shown the necessity of protecting this part a little more, for which a plan has been

submitted, and approved by the builders. To obviate the unpleasant sound occasioned by the pitching and rolling of a clincher-built boat, several of the "lands" above and below the waterline are filled in; so that she is as silent at sea as if she were carvel-built.

The height of the mainmast, which is stepped only 18 inches from the stem, is 21 feet above the gunwale; its diameter is 6 inches (or circumference, on deck 19 inches, at the sheave in masthead 14 inches), and weight, including ironwork and gear,  $1\frac{3}{4}$  cwt. The mizenmast, in height 13 feet above the gunwale, is stepped just within the transome; thus there is a clear drift of 26 feet between the masts.

Persons viewing her suppose that the mast being so far forward must tend to pay her head off when reaching or closehauled; but, the mainsail sheeting 21 feet abaft, the effect is so much the reverse that she carries a strong weather helm reaching, and if left to herself in a breeze, closehauled, invariably tends to wind, whether the mizen is set or not.

The mainsail—of No. 5 double, 2 feet canvas split—is a working lug, with an upper tack-tackle hooked into an extra cringle above the third reef for peaking the sail, and a lower tack-tackle at the foot of the mast for trimming it. When the lower tack is triced up the sail works clear overhead, enabling one to work forward on deck with safety. The length of the yard is 13 feet, the head of the sail 12 feet, and the foot  $18\frac{1}{2}$  feet.

When a reef is to be taken down, or sail temporarily shortened for a squall, I hook the reef-tackle

into the fourth cringle of the after leach, lower away main halyards sufficiently, take in the slack of the upper tack-tackle until it is nearly two blocks, peak the yard again by "setting up" halyards, and then bowse the sheet aft with the reef-tackle. When this is done, half the sail remains properly set, and the boat is under command during the process of reefing, or until the squall has expended its violence. If a reef is to be taken, the lower tack-tackle and mainsheet have to be transferred to the cringles above and the sisterhooks moused, the two hoops on the mast shifted a cringle higher, the tack and sheet rolled up and secured with short pieces of small manilla rope having an eye spliced in one end, eighteen reef points tied, fall of mainsheet belayed—leaving plenty of slack so as not to interfere with hoisting the sail, reef-tackle cast off, and upper tack-tackle overhauled. Then hoist away mainsail—taking care to keep your head out of the way of the upper mainsheet-block when the sail flaps in the wind, peak with upper tack-tackle until the sail is girt from the tack to the peak, bowse down lower tack, throw her up into the wind and get the sheet aft. If the sail is not then as flat as it might be, I put a strap on the fall of the main halyards (which leads aft to the waist through a block at the foot of the mast), hook in a luff-tackle, shake up in the wind and bowse away until no more can be got, belay the slack of main halyards and remove the strap and tackle. With a strong crew—as in match sailing—the lower tack would be set up and the mainsheet

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hauled aft before hoisting; but single-handed the sail must be free of all impediment, to enable it to be hoisted at all. When dry the weight of this sail with yard is 92 lbs. The stormsail differs from the mainsail only in size, being 6 feet on the head and  $13\frac{1}{2}$  feet on the foot. The hoist is the same, and its weight with yard  $\frac{1}{2}$  cwt. It is necessary to state these particulars to account for the time expended in making or taking in sail, and to account for one's hands getting into such bad condition after every two or three days' rough encounter with the elements.

The riding gear consists of 30 fathoms  $\frac{5}{16}$  chain, a bass rope of 40 fathoms, and another of 25, besides sundry pieces of manilla, to supply deficiencies and for mooring ropes. There are three anchors, 38 lbs., 28 lbs., and 20 lbs., and a grapnel.

Amongst articles in the inventory, some of which belong to the 'Orion,' are the following: McDonald's patent folding boat; indiarubber boat; a 30-gallon boat tank, of indiarubber, stowed beneath the after platform, and worked out with a zinc hand-pump; filter in basket-work; a two-gallon water-can; cabin table with flaps, containing cellaret; folding table, to fit up in the waist of the boat in harbour; an American chair with arms; a camp-stool and two cork stools, the latter serviceable as extra seats or to buoy dropped moorings; a hammock, horsehair bed, feather pillow, and blankets; portable closet; canvas awning, 13 feet by 8, which, besides largely increasing the accommodation, secures comfort and

privacy in harbour; zinc safe in basket-work, 2 feet by 1, kept under main thwart in the waist; a 7-lb. hand-lead and 10-fathom line, a 3-lb. ditto and 3-fathom line; Walker's patent log and 25-fathom line; two binnacles, with spirit compasses and lanterns; two riding lights, one a patent triangular, with extra coloured slides; a cabin lantern and a candle-lamp; an eight-day clock, lashed up firm and protected from damp by a waterproof covering; a fair assortment of carpenter's tools, including axe, crowbar, and saw; various sizes of galvanized iron shackles, hooks, and thimbles; brass thimbles, screws, copper nails, &c.; spare canvas for parcel-lings; oils, lamp-feeders, scissors, oakum, and cotton waste; a petroleum stove, the Acme, in which alterations to adapt it to boat service were carefully carried out to suit my views by Messrs. Deane and Co., of London Bridge. I divided the large flat reservoir into three compartments fore and aft, or in the direction of the wick, which is a 4-inch. Communicating with each other only by an opening of  $\frac{1}{8}$  of an inch at the after end, I considered that, if the boat were heeling over and plunging about, the centre compartment containing the wick would never be empty while there was any appreciable quantity of oil to consume. The burner was soldered in, the indicator closed in the same manner, and the feeder protected from leakage by a washer. As I only required the oven for baking stale bread, I had the bottom part closed against any possible smoke from the flame. With these alterations it answered

admirably, and frequently rendered the situation tolerable, even to cheerfulness, when it would otherwise, from the excessive rains and extreme violence of the elements, have been almost unbearable.

Determined to be independent of the shore for long intervals, if I chose, and to have only light marketing to do occasionally, I laid in a sufficient supply of Bass's pale ale and of claret to last for a month, a small quantity of whisky, and a bottle of brandy for medicinal purposes, which I softened by burning before starting; potatoes for a month; a ham for broiling; some kippered salmon, followed up when gone by Scotch herrings in tins to alternate with the ham for breakfast; a locker full of preserved meats of various kinds; Swiss milk, cocoa, tea, and an ample supply of the best coffee I could buy in London, cake, biscuits, jams, sweetmeats, and tobacco.

What with my wardrobe contained in three sail-bags and a portmanteau, and the hundred etceteras, such as coffee-pot, tea-pot, crockery, glass, knives and forks, &c., &c., all of which had a proper place assigned them, without which half the articles enumerated would have been useless; topping all up with about 2 cwt. of new rope, spare tackles, straps, &c., sorted and secured with yarns to the timbers along the sides of the cabin, where they could be instantly selected as desired; he must have been a man less easily satisfied than I am who could have viewed the significant confusion reigning in the domestic department at starting otherwise than as evidence that he was well

found, even though champagne and pâté de fois gras were not included in the list of necessaries.

*Aug. 7th.*—The captain of the training ship 'Arethusa' having obligingly consented to allow my tank to be supplied with filtered water from that vessel, I was towed out of the creek and alongside by one of her boats. The wind being too light to sail, and the confusion on board very great, as it always is until a place has been found for everything, I hauled off when the tank was filled, and let go the anchor for the night.

*Aug. 8th.*—I felt so extremely unwell, and had made so little progress in reducing the confusion to anything like order, that up to the very moment of sailing I was undecided whether to proceed or to return into the creek. So strong was this feeling, really due to such a condition of ill-health that I almost loathed food, that at 4.30 P.M., when I got under way, I warned my ship-keeper in the creek to expect my return in two or three days. The wind was light from south-west, with a cloudy and thundery appearance. Being much occupied in various ways, and there being nothing in the way at the time, I suffered the boat to be drifted into the lower bight of Gravesend Reach, when suddenly the wind shifted for a moment to the northward, and then fell flat calm. Observing the buoy off Cliff Creek, and a schooner at anchor just beyond, I became slightly alarmed; but perceiving that the buoy was well open of the schooner, and that her masts were likewise well open of each other, it seemed impossible I



should drift in upon them. This, however, being the case, I bounded forward and let go the anchor, unfortunately not in time to bring her up, and she fell athwart-hawse the schooner, with her jibboom in my mainsail about 15 feet from the deck. The canvas being stout, and the sheet not flat aft, the elastic resistance it offered gradually checked her way, and allowed her to fall more gently than she would otherwise have done upon the schooner's port bow; when she heeled so alarmingly, from the rush of tide, that the master considerably hove me a rope by which to escape if she foundered. My first impression was that the mast would come down, and I stooped below the coamings to avoid being smothered by the canvas or entangled in the ropes. Seeing that the gear stood the strain, I went aft and let the mainsheet run out and partially unreeve, which cleared the mainsail from the jibboom end and righted her a little. By this time the Coastguard officer and four men from the station at Cliff Creek, with the promptness and kindly readiness to assist which everywhere characterizes the service, arrived upon the scene. Jammed on the schooner's port bow with my mast on the starboard side of her bowsprit, the only hope of escape lay in passing round to her starboard side. While the schooner paid out chain, which momentarily eased the pressure, our united efforts were directed to forging the lugger half her length ahead. This caused her to hang on the schooner's stem, slightly abaft the midships, her head being prevented from swinging down by her own chain, which now became taut as a bar on

the port bow, and held her athwart stream, until the mizen, being first violently swayed to loosen the wedges, was unstepped and laid upon the deck. Paying out my chain, while the men bore her off bodily, she passed fairly on to the schooner's star-board bow; and then, keeping her head to with a rope while they bore the stern off with spars, she swung round and brought up gently alongside with no harm done. The anchor was so deeply imbedded that it required the strength of all hands and a hard sheer to break it out of the ground, which done, she was sheered into a berth below the schooner and the anchor let go for the night.

When the mizen was stepped and the mainsail furled, and it was ascertained that she was not making any water, compliments suitable to the occasion were exchanged. The master of the schooner behaved admirably, and—rare but most agreeable experience—wanted to return part of what I thought was due to him. At my request they then left me to wash down and restore order. When that was done I got some tea, put up the riding light before the mast, and turned in at midnight to think about it. Before starting, and when sailing down, I felt that if she were sunk, or given away to anyone who could handle her properly and would keep her in good order, it would be no great matter; but now the feeling was entirely changed. Had she been less powerfully built or less well found than she was—it was not on board there I should have “turned in” that night.

*Aug. 9th.*—A gloomy and dirty morning, with a

fresh wind from the nor'ard, a lively ripple, and a drizzly rain. After a cold sluice, which on board ship has often to do duty for sleep, I hastened to get under way, notwithstanding that, being quite undecided where to go, I was far more disposed to lie there and do nothing. But during the ebb tide a strong north wind renders the riding off Cliff Creek very undesirable in a boat of light draught with a single anchor and a dinghey astern. Not simply on account of the motion, to which a sailor ought not to object, but because the boat being light and buoyant would run over her anchor, take violent sheers from side to side, and pass half the time in the trough of the sea, with the chain grinding and sweeping the keel from forward aft, or from aft forward, ending in a violent jerk and a moment's peace; only to begin the same round over again, to which it would be absurd if a sailor did not object, especially in close proximity to other vessels and a lee shore.

It was 5 A.M. when I commenced operations by taking down the riding light. From the trouble it gave, owing to the quick motion of the boat requiring me to hold on with one arm, and the narrow escape the lantern had of being dashed to pieces against the mast, I resolved not to hoist it in the same position again. 6 A.M., under way with the whole mainsail set to a roaring breeze and heading down the river. Having come out for health I had decided by the time the sail was nicely trimmed that it was advisable to go in search of it, and that there

was no more likely place to find it than in the neighbourhood of the South Foreland. So I conquered the miserable state of indecision that had plagued me for two whole days, and, being averse to half measures, was bound to Dover.

At the start it was chilly and uncomfortable; but as the morning advanced the wind gradually backed to the north-west, the rain ceased, and the sun gleamed occasionally through the broken clouds.

The preparation of meals when a vessel is on a wind and sea moderate is far easier than when running free. Presupposing a moderate degree of attention, if the sails are properly trimmed, a vessel should be able to sail herself close-hauled during a temporary absence from the helm; but running free, according to my experience, the helm cannot be left a minute without sheering off the course, and either broaching-to or threatening a gybe.

Although quite unable to enjoy food of any description, I took the opportunity of the course being almost clear of vessels, between the Nore and Herne Bay, to light the stove and get some breakfast. Running dead before the wind it was a most troublesome and unsatisfactory performance; especially as in obedience to a rule, indispensable to comfort, cleanliness, and economy—a rule no more admitting of exceptions than the laws of the Medes and Persians—everything had to be washed up and stowed away again in its place. This seems too easy to be dignified with the name of “work.” But if there were no need to watch the vessel and be constantly

correcting the course, greasy utensils, when there is a scarcity of boiling water, are very troublesome to deal with; and to clean out properly a French coffee-pot in four parts is a work of art for an unpractised hand. That such employment is at all times exceedingly distasteful, should be a sufficient reason for making a rule on the subject, and observing it strictly, whatever the hour and the personal inconvenience. For if things are not washed up when used, it is not deferring the cleaning to a more convenient time, but paving the way for habitually using them dirty. If objection be taken to such work as ungentlemanly, no one will dispute that neglect of cleanliness and order, begotten of idleness and silly pride, is infinitely more so. The coffee-pot and cooking utensils were put away clean on a shelf forward of the mast, and kept noiseless by a piece of spare canvas jammed between them. Inside the cabin bulkhead I had put up a long strip of leather, nailed firmly at both ends and divided with nails at intervals, in which to insert the knives, forks, spoons, and lamp scissors, so that they could neither stray nor jingle with the motion, and were always at hand.

The domestic work was fortunately over when the wind freshened so much that the boat staggered under the sail, and kept me a close prisoner at the helm. The course, now straight for the North Foreland from Herne Bay, brought the wind and sea on the quarter, and made the steering so active and fatiguing that I had to "purchase" the lee tiller-

rope, by passing it round a cleat on the main thwart, and pull on the bight of it.

I have an iron tiller about 7 feet long, but prefer to use a yoke of my own design. It is constructed of iron, with arms 3 feet long. At the end of each arm is a brass-sheaved iron block fitted with a horizontal joint and a limited swivel, which allows the block to accommodate itself to the angle required, without the possibility of twisting the standing and running parts of the rope together. It is a powerful purchase, and the ropes are long enough to lead to any part of the vessel, excepting quite forward. On the wind, or running dead before it, the steering is easy; but reaching fast with the sea on the quarter or abeam, the helmsman has plenty to do.

11.15 A.M., passed the Reculvers, against tide; and 1 P.M. Margate Pier, which seemed deserted; as at that hour the swells had all gone home to dinner.

Rounding the Foreland, before the sea, the patent folding boat—which is no “swell” to look at—seemed desirous to follow their example and desert me. Sheering on the sea, it jerked the headfast so violently, that I feared it might break adrift and compel me to put the lugger on the wind to pick it up again; which, under so heavy a press of canvas, I was ill prepared to do.

It may be asked how I came to be towing a folding boat on such a rough day, instead of having her doubled up and snugly stowed on board. The fact is, I had her strengthened to such an extent to

fit her for my rough work that she weighed over 90 lbs. instead of 50, and was so stiff in working that I was not disposed to expend the strength required to take her up, fold, and berth her on board. Moreover, being so heavy and cumbersome for one hand to deal with, she marked everything with which she came in contact with her paint and greasy hinges. Standard cwts., and even  $\frac{1}{2}$  cwts., with their compact form and convenient rings for lifting, are not playthings; but they are so in comparison with similar weights represented by awkward-shaped parcels several feet in length, and having no handles whatever,—particularly so when the motion of the vessel is great, and it is difficult to move or to stand without holding on.

I never pass the North Foreland on a sunny day without admiring it extremely, not for its boldness and grandeur, for, in comparison with the South Foreland, Beachy Head, and the towering chalk cliffs of the Isle of Wight, it has neither, but for its numerous miniature bays and sandy coves, formed by the pretty indentations of the white cliffs, and its wealth of agriculture, trees, and windmills exposed to view down to the cliff-edge by the gentle and unbroken elevation of the land behind,—the charming little nook of Kingsgate and the lighthouses forming a centre-piece of the whole. Passing this picturesque little spot with a fine breeze off the land and a moderate swell, which, owing to the projecting reefs of the Foreland, had ceased to be troublesome, was really delightful, and could only have been more

so if I had been able to enjoy a good luncheon and the orthodox pipe, which, unless there is something wrong in the sanitary department, seldom fails to accompany a much appreciated meal at sea.

4.15 P.M., off Deal Pier. Band playing—boys fishing—boats sailing—paterfamilias, and the whole tribe, out for a row—the beach alive with ramblers in search of “precious stones” and other treasures cast up by the sea,—a scene of peaceful enjoyment which never ceases to interest those who are able to stand close enough in shore to observe it. The wind having backed to the westward, came off in puffs alternated with flat calms—a sure sign of its decline for the day.

I expected to make Dover about seven o'clock, but at the South Foreland encountered the full strength of the tide; at the same time the wind was light and nearly ahead. Here I came up with a few laden colliers, with one of which I had a little friendly chat in passing, and could not avoid noticing how much more handy and seaworthy they appeared with the Plimsoll load-line than in the recklessly heavy trim of years gone by. They were, however, quickly left far behind, when, to cheat the tide as much as possible, I made short tacks; several times standing in to comparatively shallow water under the towering cliffs, which, while there is the faintest glimmer of twilight, never cease echoing the plaintive, simply energetic, or else angry cries of invisible sea birds—whether relating in inflated language the story of their first venture on the watery region



below, "curtain lecturing," or engaged in perpetual disputes as to the possession of "coigns of vantage," I never can make out.

As there was no prospect of reaching Dover before dark, and the boat was not heeling much, I seized the opportunity to have a sort of luncheon-dinner at the helm, of cold roast lamb, bread, lettuce, and a small bottle of "Bass," carefully transferring the plates, &c., to the weather side the last moment before going about. Abreast of the "Castle Cliff," a galley under sail to windward bore down upon me, to ask if I wanted assistance into harbour. Upon my civilly declining them several times—for all their class are very pressing—they left me with "No offence, I hope," a species of parting salutation I observe never proceeds from nice men; so that I was glad I had kept my own counsel, and had not supplied them with another excuse for importunity—the danger of bringing up for the night at sea.

With the anchor ready for letting go, the main tack triced up, and the halyards clear, I stood close in to the beach, where I supposed the club-house to be; then ran off a proper distance, heaving the lead, and at 9 P.M. let go the anchor, having been fifteen hours under way.

Although it was a beautiful starlight night, and the bay with its numerous town-lights looked very homely and peaceful, I took two reefs in the mainsail before furling it, had some tea, and a general clear up, and then turned into my hammock for a much-needed night's rest.

## CHAPTER III.

*Aug. 10th, Sunday.*—After church time, landed for letters. 3 P.M., weighed anchor and went into harbour, just in time to furl and cover the sails, get dinner, and attend evening service. My hands were so sore from a cut finger and abrasions, that it was advisable to allow them time to heal. Even in harbour there is very little time for idling; as, in attending entirely upon oneself, and keeping such order as should infallibly distinguish private property, there is always plenty of employment. Besides, I was engaged in a correspondence which left barely time to scan the newspapers, and, for all the service they were, the box of books with which I had provided myself might have been left at home.

Dover is undoubtedly the best rendezvous for yachts between the Thames and the Isle of Wight—especially for those whose owners have the good fortune to belong to the Royal Cinque Ports Yacht Club, which occupies a central position on the shore of the bay, and commands a better view from its windows than any club in the kingdom. Dover is, however, rising so rapidly in commercial importance, and its docks are becoming so crowded, that it will be a great boon to yachtsmen and to the overworked officials of the port when the bay is enclosed (like

Portland), and the former are enabled to ride in safety at anchor outside. Even then, some will avail themselves of the inner recesses of the port to escape the swell, which, in bad weather, no breakwaters will entirely exclude.

*Aug. 14th.*—Very little wind, and a burning sun, which, in harbour, was so oppressive and relaxing that I went out and anchored in the bay. The wind being so light that the lugger would ride to the weight of the chain rather than to the anchor, I took the precaution to lay a kedge inshore and put a good strain upon it—a precaution which should never be neglected when there is a prospect of lying exposed to the sea for any length of time. The object of this is to prevent the vessel swinging over and fouling the bower anchor, upon which her safety depends.

Determined not to abandon my position for a trifle, I paid out all the chain, and rode to a patent cable buffer, belonging to the 'Orion,' which, being too powerful to afford sufficient play for such light riding gear, I modified, by hooking one end of a stout tackle into a strap at the foot of the mast, the other end into the shackle of the buffer placed 10 feet abaft the mast, and rode to the fall of the tackle, keeping all rope inboard and enough of the chain to "bitt" securely abaft all. The effect of this arrangement was to allow the chain an elasticity of *four inches*, if the strain were sufficient to compress the buffer *one inch*; and if the fall of the tackle parted—which was scarcely possible—the

chain was still perfectly secured. By experiments tried at home, in which the same tackle was used, it required a strain of 8 cwt. to compress the buffer 3 inches—a strain which a 7-ton boat could throw upon it only under extreme circumstances.

The motive for riding to a buffer (or compressor) is obvious to experienced seamen, but to others an explanation may possibly be serviceable. Leaving out the question of tidal currents, which, with few exceptions, aggravate the difficulties of hard riding, my remarks must be supposed to apply to roadsteads little subject to their direct influence.

A vessel, wind-rode in moderate weather, and having a proper scope of chain—which, on account of its weight, assumes the form of a curve—rides with a greater or less proportion of it on the ground, according to the strength of wind,—in which case the strain upon the anchor is horizontal, or in the direction most favourable to its resistance. Thus, while the wind is not sufficiently strong to force the vessel to the greatest possible distance from her anchor, she rides easily; since the curvature of the chain acts as a spring which gives to the sea when the vessel rises upon it, and brings her back on the “scend” when the sea passes aft.

In a gale, when the vessel is forced to the greatest possible distance from her anchor, the strain, being in a direct line from the hawsepipe to the anchor, is diagonal, and tends to lift the stock off the ground,—a position which, in smooth water and a steady strain, may be consistent with comfort and safety,

but in a heavy sea is not consistent with either. Supposing the anchor to hold firm and the chain to be at its greatest tension when the vessel is in the hollow of a sea, the water being deepened by the height of the succeeding wave, it is clear she must spring forward a proportionate number of feet to allow the wave to pass under her. The strain being suddenly relaxed when the sea passes aft, the "scend" slacks the chain, and—by force of wind—she immediately begins to gather way astern. With this tendency already in operation, the next sea, if a severe one and a breaker, would force her considerably beyond the range of her chain but for the resistance of the anchor, which brings her up with a sudden jerk, called a "snub," that is heard and felt in every part of the vessel, and which may be attended with either of the following serious consequences:—She may ship the sea; carry away the pawls, and surge all the chain if, from neglect, not "weather bitted"; capsize the windlass; start the anchor; or snap the chain. To the first and two last of these accidents, the best built and best found ships and yachts are liable. The second and third result from defective construction, previous strain, or age. From observation, I should think the proportion of yachts—especially among the smaller ones—that could ride to their windlass and bitts in a heavy breeze on the land, is very small indeed; but even with the best and most powerful, there is serious cause for anxiety when the vessel snubs with a full scope of chain. In the absence of a cable

buffer—which from experience of a gale in Torbay I am convinced no sea-going yacht, or ship, should ever be without—ropes may be bent to the chain forward of the windlass, and secured to the mast; provided the turns on the chain are taken in such form as to be easily cast off or cut away clean, in case it becomes necessary to “slip” and get to sea—a contingency for which every precaution should be made, whether there is a determination to hold on or not. Other and neater dispositions might be made in *anticipation* of bad weather, but none can be so simple or effective as the buffer.

The burning heat of the day was followed by a sea fog as dense as it has ever been my lot to witness. From eight o'clock in the evening until eleven o'clock next day not a vestige of the town, or any other object, was visible from my anchorage. That I had ample opportunity of estimating the merits of every species of sound signal incidental to a fog on the “great highway of nations,” and could not plead sleep as an excuse for neglecting the riding light, can be gathered from the following. Ships' bells and fog-horns, and steamers' whistles, in every key, according to size and power of steam employed in producing the blast, were going all night long. A deep-toned bell at the Admiralty Pier uttered a solemn warning at intervals of  $7\frac{1}{2}$  minutes—its funereal tone most forcibly reminding one of the uncertainty of life. Every two minutes the South Sand Head lightship contributed to the babel of sounds the guttural screech of its fog-

horn—a detestable sound, calculated to warn the careless of the existence of an “evil place beyond.” For some hours during the night a gun was fired from the inner pier-head at intervals of ten minutes, to direct an overdue mail boat, if she should chance to be within hearing. Lastly, the wind was so light that the chain hung “up and down,” and a teasing little swell from the southward caused it to strike against the stem of the boat with every roll. Although a most unpleasant night, I consoled myself with the thought that “it might have been worse”; for, if I might have been in harbour, the chance was equally great I should have been drifting helplessly at sea, and the compromise was much in my favour.

*Aug. 15th.*—Dense fog, alternated with intervals of brilliant sunshine after midday. Landed on the beach in the dinghey, called at the club for letters, and did a little marketing. Night set in fine. Wind south-west, light. Barometer falling.

*Aug. 16th, A.M.,* wind south-west, with rain. After luncheon the wind shifted to the westward, and the sun shone pleasantly enough to induce me to land on the beach, which I did pretty fairly, in spite of the swell then beginning to be troublesome. But in putting off again an hour later, my frail boat shipped so much water that it was difficult to make headway against wind and sea. Unfortunately I had omitted to take a baler. Being a flat-bottomed boat, the water lurched heavily from side to side, and it was only by counteracting with my weight

the tendency to capsize that she was kept afloat. That I was glad to be on board the lugger again need hardly be said.

The barometer should have improved with the change of wind; but it did not, and the sea rising with an ominously freshening wind created a doubt in my mind as to the advisability of lying there during the night. After an uncomfortable dinner in the open air—taken there partly because I was not sufficiently well to enjoy a meal in the cabin when the motion was so severe, and partly for the purpose of observation—notwithstanding the sky was beautiful and the evening most enjoyable, I buoyed the moorings with a cork stool, slipped them, and with as much wind as I could look at under a double-reefed mainsail, saved daylight into harbour. About 11 P.M. the wind backed to the south-west, and a heavy gale set in, accompanied with torrents of rain.

*Aug. 17th (Sunday).*—Blew hard from W.S.W., with a tremendous sea in the offing. The sight of the day was to watch the sea roll in by the Lord Warden Hotel and in the bay. If overnight any doubt had remained on my mind as to the necessity of abandoning the anchorage, it must have been dispelled instantly when, at low water, I counted only four big seas between my cork buoy and the breaker on shore—a position I could not have maintained during the preceding low water when the wind was south-west, although the depth was 2 fathoms, and the draught of the lugger only 3 feet.



Had I listened to advice, I should have been anchored even still nearer to the shore.

As I had been seen riding there two days, and was known only to have gone into harbour, I left the moorings without any doubt of their safety from depredators. But my confidence waned when told, by men well acquainted with their proclivities, that the sea-prowlers—who, by-the-by, are nearly related to the “black doll” gibbeted in the back streets—would probably take them up if they got the chance, send them in to the “receiver of wreck,” and claim a reward. Determined to resist any such attempt at extortion, which, whether successful or not, must have occasioned me intense annoyance, I took steps to prevent it, or, at least, to ensure a disappointment if it were attempted.

On our coasts, with proper allowance of space for getting under way, the draught of large ships prevents them being anchored inadvertently within the line of breakers. But small vessels are often anchored in dangerous positions through attention being directed solely to their limited draught of water, instead of the far more important consideration of the possible line of breakers—which depends entirely upon the shelving of the ground outside. For instance, vessels of like build varying from 5 to 100 tons, and in draught from 3 to 10 feet, might ride a gale with equal safety in 4 fathoms, low water, provided shoal soundings extended to a sufficient distance outside, to moderate the sea rolling in from the deep water beyond. Whereas, the

circumstances being in other respects similar, if the soundings increased rapidly outside, their position would become extremely perilous towards the period of low water; and not the largest, but the smallest and least powerful would be the first to succumb to the violence of the sea—the question of a few feet difference in draught not being a matter of consideration in this case.

It is said to have been ascertained that a wave breaks when the depth of water in the trough is equal to the height from the trough to the crest; its character then undergoing an alteration from a wave of oscillation to a wave of transference. Thus in a calm after wind, a boat (or any floating substance), in respect of horizontal motion, will remain stationary outside the breaker unless a higher wave involves it in its break, when it is hurried towards the shore with a violence and rapidity that no anchors or exertions of oarsmen can withstand. This may be true in regard to a wave from deep water meeting a rapidly shelving bank; but I am certain that where the bank shelves very gradually, the change, in a modified degree, begins to take place earlier, or as soon as the base of the wave is retarded by contact with the ground. Otherwise, in a moderate sea, divers would not, from this cause, be obstructed in their work in depths of 5 fathoms and upwards, as we know to be the case.

I once had an example of this when seeking a landing in Mount's Bay, on the coast of Cornwall. Attracted by the beauty and quiet aspect of the

shore at a distance, and wanting the experience I acquired an hour later, we ran down to the Loo Sands in the 'Sirius,' 11 tons, and 6 feet draught, with a nice topsail breeze on the quarter, and a swell that was not at all inconveniently felt on board. Not until it was ascertained that we were in 5-fathom water on the sea next the breaker, and, from that comparatively near position, were able to observe the immense distance the latter travelled up the steep sand, did we become aware of the formidable nature of the swell, and the impossibility of landing there. As the sea was long, and, in my estimation, not more than 5 feet high, there was no danger in approaching thus near with the wind free enough to luff out at discretion. From this impracticable spot we made for the Pra Sands, about two miles to the northward. Under the lee of a considerable rocky projection, called Black Point, the sea appeared so calm that, determined not to be disappointed of a ramble on shore, the mate was left in charge to "stand on and off" while three of us went away in the dinghey. She was a nice little boat 10 feet by 3 feet 6 inches, with a flat floor and full quarters, to which good qualities we eventually owed our safety. Quite under lee of the Point an attempt to land in a gully between the rocks was made, which so nearly proved disastrous that we backed out in haste, and after pulling two or three minutes lay on our oars abreast of the sand at a distance certainly of not less than half a cable (or 100 yards); intending only to look about a little,

and then return to the vessel. While lying in this position broadside on, I saw a sea coming which, although there was not a speck of white upon it, had such an evident appearance of mischief, that I shouted to the bow oar, "Get her head round quickly!" which was only just accomplished, when we felt ourselves travelling stern first at a prodigious rate towards the shore. Although still in comparatively deep water, with a "dry boat," I felt so certain resistance would be worse than useless that I directed all my attention to keeping her end on with gentle way ahead. Pulling gently with one hand, and, to ensure keeping our seats, clutching the gunwale with the other, we awaited the inevitable onset with no agreeable sensations. Presently she again reared on end, and in a perfect cataract of foam, which bounded over head and ears and half filled the boat, we were again in rapid motion, stern first, towards the shore. The moment she stranded, which was on the recoil and about half-way between the "break" and its "mark" on the sand, we got out and formed a group, holding firmly to each other's arms and to the boat. When the rush came we moved forward with it, at every step shoaling the water, so that it never reached above our legs; the waterlogged boat serving as an anchor to steady us against the recoil. Before the next wave came the boat had been canted, to clear her of water; and by its aid we beached her high and dry. Everything moveable—such as sculls, head and stern sheets, rudder, &c.—which had washed out while moving

up the sand, was picked up close by; and beyond the latter being broken when she reared on end the second time, there was no harm done; which shows how necessary it is that seats should be kept in a time of danger. Later, I engaged two men to help us off between a lull in the heavier seas, which was not accomplished without difficulty and shipping much water. Never was a wholesome and beamy vessel more thoroughly appreciated than when, after a long pull to windward, we stepped on board the 'Sirius' again that day.

The round-topped wave outside the breaker on the Loo Sands clearly was a wave of oscillation. The character of the two which stranded us on the more gradual incline of the Pra Sands needs no remark, excepting that the depth from the trough to the ground of the first was certainly twice, if not thrice, as deep as from the trough to the crest; otherwise, it must have curled and swamped us, as did the second.

Where shallowness of the sea offers no obstructions, the recognized proportion between the height and length of waves is 1 to 10—which proportion holds good during the period of formation, and while the force of wind continues; but with a failing wind waves decrease in height without contracting in length; thus the depth at which the disturbance of a wave is felt by a diver, or its base is retarded by contact with the ground, depends *not* upon its height from trough to crest, but upon its volume. Viewed at a right angle, I believe that *absence of perspective*

(as there would be in blades of corn growing on a hill) throws part of the length of a wave into its apparent height, and causes it to appear, at least, twice as high as it really is,—an illusion instantly dispelled by a parallel view, or in the direction of the trough. The highest sea recorded by Sir Jas. C. Ross is 36 feet, and by Lieutenant Maury, U.S.N., 32 feet, with a velocity of 26 miles. The greatest length ascertained by Sir Geo. Grey, on a voyage home from Australia, by paying out a line astern, was 338 feet and its velocity 28 miles; which very nearly accords with similar observations made by others near the Cape of Good Hope. On an average, under way,—or if a ship were stationary, which practically amounts to the same thing—she would encounter three or four such waves per minute. To imagine how severe this must be, let anyone sitting quietly at dinner on shore fancy the floor of the room undulating to this fearful extent, or even a fourth part of it, and he will perceive how unnecessary is exaggeration of the reality. When blowing hard, an angry sea 7 to 10 feet high is very formidable to a small vessel, as those who take a run to Margate or across the Channel in steamers fifty times the size of the 'Procyon' cannot but be aware. Those who think lightly of a sea only 5 feet high should observe it in moderate weather, when there is no cause for apprehension, from a small boat to leeward of Salcombe Bar. And those who doubt a sea 7 to 10 feet high being formidable, should see it, as a swell 200 feet long, strike the outer rocks

of Scilly, or run upon the Longships: yet it is not a tenth part so formidable to encounter under way in deep water in this form, as in that of an angry sea whose length is but from 70 to 100 feet, or in tidal currents off the headlands, where it is often considerably shorter.

*Aug. 18th.*—Went out for a cruise with two reefs down, and afterwards returned into harbour, as there was too much sea for taking in the moorings.

*Aug. 19th.*—Morning fine and sunny. Had the hose from the quay, and filled up water. 1 P.M., in a light W.S.W. breeze and a drizzly rain, I sailed out to the moorings and took them in. After luncheon, weighed both anchors and shifted my berth into deeper water. Intending to leave Dover in the morning, I stowed the kedge anchor away, and rode to the bower only, with 14 fathoms of chain fast to the cable buffer. Where bound to, it was impossible to say; as the weather was so thoroughly out of gear, that the chances were many against any plan resolved upon overnight being practicable in the morning. The barometer was steady at 29.9, and yet the fitful drizzle of midday, that looked as if at any moment it might yield to the sun's power, changed into a continuous rain and thick haze as the afternoon advanced.

The reader may perhaps imagine that the hours passed slowly. If so, he can have no idea of the time consumed in all this anchor work; in washing down thoroughly with pure sea water—indispensable to comfort after a few days in harbour; in double-

reefing the mainsail and furling the sails; in seeing everything clear and in its place—that it might be possible to make sail in the dark; in attending to the lanterns, stove, stores, and general cabin work; and finally in preparing a hot dinner. Long before the latter was disposed of, the night had set in dark and threatening, with a teasing swell, which, about the bed-time of folks on shore, caused me some anxiety. With every roll of the lugger there was a noise like the blow of a mallet, which might have rejoiced the heart of a spiritualist, but was a great annoyance to me. Having ascertained that the chain was not in fault this time, I diligently set to work to account for it. After a tedious search on deck and in the lockers fore and aft, I leaned over the table in the cabin, and threw the rays of the lantern on the heel of the mast and into the eyes of the vessel. To my surprise, I noticed that the mast step was loose, and, *apparently*, the timbers and planking of the starboard bow in movement. Observing about three-eighths of an inch play between the step and the timbers, I arrived at the conclusion that the fastenings of the step had been injured when she was athwart the schooner off Cliff Creek, and that the leverage of the mast, in “carrying on” and in rolling at anchor since, had forced the fastenings of the bow to that extent. Afraid to drive wedges, for fear of increasing the mischief, I essayed to stop the noise—caused by the friction of wet hard wood—by cutting away a piece of the oak step with a chisel and mallet; but the position was so



awkward for such tough work, that I succeeded only in rendering myself uncomfortably warm. Unable to satisfy myself that there was no cause for apprehension—which could be ascertained only by going aground—I returned to examine it over and over again, and hardly like to say what I anticipated if she rolled excessively. As the night was too dark to move except under compulsion, and I had no confidence in the dinghey astern, no alternative presented itself to my mind but to fill the india-rubber boat, exercise patience until the morning, and in the meantime draw upon Mark Tapley's infallible means of consolation as largely as circumstances would permit.

For needful rest of limbs I turned into the hammock "all standing," to think what had best be done. My first idea was to go into harbour as soon as possible; but when I considered the great advantage of submitting her for examination to those who built her and were acquainted with the fastenings, I decided to go to Whitstable.

*Aug. 20th.*—During the best of the eastern tide in the offing there is a strong eddy at the anchorage, which swings a vessel in the contrary direction, or with her stern towards the pier. This was the position at 2 A.M., when, the wind having freshened from W.S.W., the sea several times hit under the quarters and descended on board in a heavy shower of spray. The motion being so violent as to swing me against the stormsail, the latter required to be temporarily lowered out of its berth, to allow

the hammock the fullest possible play; as upon these occasions it takes entire charge of the cuddy, with myself—barring any special cause for apprehension—snugly stowed in the interior. Confessedly *not* snug, I turned out, partly to ensure the riding light was doing its duty, but chiefly for the purpose of taking a general survey of the situation. There was, however, nothing to be seen except lights dimmed with haze, complete darkness out at sea, and a heavy pall of black overhead, indicative of an impending change. As the hammock counteracts the effect of a severe rolling—which is troublesome, when to struggle against being dislodged from a seat is the only occupation on hand—I took refuge in it again, and must own, devoutly wished for daylight. Whether dozing or not, I cannot say; but shortly after four o'clock I became aware that she was wind-rode and very lively. The wind whistling in the halyards, and a confirmatory glance at the barometer, convinced me that the anchor must be secured without delay, or it would have to be abandoned along with 15 fathoms of chain. Raining in torrents, with the higher part of Dover in the clouds and the South Foreland cliffs shrouded in impenetrable haze, the outlook was not cheerful, when, clothed in waterproofs, and in the following order, I set about a task which the value of an anchor and chain would not induce me to repeat at a similar expense of energy and risk of amputating fingers in handling the chain. I mean that “practice makes perfect”; and, looking back, I am conscious that

the appliances at my disposal were not used as advantageously as they might have been, or would be if the same task had to be undertaken again. People wonder I have not a winch, but such a one as is carried in small yachts would have been torn out of the deck the first severe "snub" which the rope tackles resisted—though more than once I stepped aside, in expectation of a catastrophe.

Having stowed away the hammock and the riding light, I set the mizen, and prepared the mainsail for hoisting; hove in the chain to 7 fathoms with tackles, hoisted the mainsail, peaked with upper tack, and hauled aft sheet, leaving the lower tack free; cast to starboard, and when about on the other tack, with a hard port helm, sailed the anchor out of the ground, righted helm, and shook up in the wind. Standing ready in the waist, I hauled in the chain until the anchor was under foot, and then, kneeling down forward, and watching an opportunity, got it aboard without punishing the bow with the flukes, trimmed the sail, and bore away for the Foreland at 5 A.M. The wind was S.S.W., as strong as she would bear without a further reduction of canvas, and when I saw how she heeled to it, and sped along in the trough of the sea, I exclaimed—for I do indulge in exclamations occasionally—"Thank God I took two reefs down overnight!" The waist was cumbered with gear. Interlaced with the chain, tackles and halyards, hard and kinked with the wet, were lurching to leeward by the sea in such a mass of confusion that, minding the helm as I best could, the work of

disentangling and stowing them away occupied me a long while. Notwithstanding I had taken a little burnt brandy and biscuit at intervals, by the time the Foreland was rounded, and Deal in sight, I felt there was a terrible void within, and for the first time since leaving Greenhithe began to anticipate the pleasure of a substantial breakfast, which the adverse tide and long distance to be run before she could be hove-to was certain to postpone to a very late hour. I passed Ramsgate at 8.30, looking cheerless and miserable in the drenching rain, and at 10.30 rounded the North Foreland, when the tide became favourable. According to common sense, and the laws which govern prudent mariners, I should have remained at the helm and have thought only of saving the flood tide to Whitstable; but if to unbend sometimes is allowable, there was abundant excuse in this instance. So without loss of time, after luffing out of the rough sea into the comparatively smooth water of Margate Roads, the yard was lowered as for reefing, the upper tack-tackle bowsed down to two blocks, and the main sheet hauled flat aft from the fourth cringle with the reef tackle, which completed the operation, and was equivalent to putting her temporarily under four reefs. As with this canvas she will neither break off nor put herself about without the assistance of the helm, it is a practical example of the plan, previously explained, for "heaving-to" in bad weather. When this was done, and the lugger was standing up for the roads with no more demand upon my services than occasional

supervision and correction, I threw off waterproofs, and I fear indulged in an unseemly exhibition of hilarity.

At first she laid "well up," or along the coast, affording me a good opportunity for a wash and for the earlier preliminaries of breakfast, such as baking the bread and boiling the water; but though I successfully prepared, and eventually did ample justice to an unexceptionable meal of ham fried in butter, warm bread, and excellent coffee with Swiss milk, its peaceable enjoyment was marred by a furious and untimely shift of wind to W.S.W., which caused her to break off, compelled my attendance at the helm on account of vessels at anchor in the roads, knocked up a turbulent little sea, which drenched me with spray, and threatened the crockery and untasted breakfast with annihilation. When, in spite of her plunging and heeling, these little inconveniences were overcome, and utensils were washed up and stowed away, there was a bit of a scramble to get the third reef taken down, and the sail trimmed in time to go about on the south edge of Margate sand. Fortunately the rain entirely ceased at noon—a change I was quite able to appreciate after twenty-four hours' experience of it.

Encountering the ebb tide at Herne Bay, I shook out a reef to beat along shore, an interesting, but rather tedious, kind of sailing, in which the light 3-fathom hand-lead was particularly useful. Shortly afterwards the main sheet carried away—an accident I viewed with perfect equanimity, since though it

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cost me some trouble to repair, there was abundant cause for congratulation that it occurred at so convenient a time and place. Continuing the "short boards," I saved water over "the Street," the chief outlying danger of Whitstable, and at 4 P.M. anchored outside the fleet of smacks off the town.

## CHAPTER IV.

FAMOUS as Whitstable is for its oysters, and in that sense interesting, between the hours of sunset and sunrise it is the most miserable and depressing anchorage I know. To be utterly alone at sea is cheerful compared to lying at anchor in proximity to a fleet of deserted smacks, which, as the tide falls, take the ground and heel over, with their masts pointing to every quarter of the compass, like "headstones" in an ancient or neglected graveyard. So complete is the desertion that if there is life on board any of them, which I doubt, it can be only of that minute kind which knows no distinction of persons after the cabin lamp is extinguished for the night.

Determined to save the night post if possible, I stepped into the dinghey after dinner, rowed as far as the falling tide would permit, and then essayed a quarter of a mile of mud flat to gain the beach. Like the Pilgrim's "Slough," there is firm ground if you know where to find it, but, for want of "directions," I found there was not only a chance of leaving my sea-boots behind, but, from the feel of it in the dark, a possibility of getting bemired up to the neck. As this was a "branch of navigation" to which my attention had not before been directed, and with which I cared not to make a "deeper"

acquaintance, I prudently acknowledged a defeat, got back to the vessel with difficulty, had tea, and turned in.

*Aug. 21st.*—Although not sensible of extraordinary fatigue over night, in the morning my hands were very painful, and every muscle in my body as sore as a boy's salient parts after his first attempt at skating. Excepting several days' cessation from work, there is no remedy so efficacious as renewed exertion; so, somewhat against the grain, I turned out in reasonable time to wash down, and soon forgot all but the hands, which, unless cuts and abrasions are carefully shielded, can only go from bad to worse. These little complaints were not new, but, as might be expected, were intensified by the heavy work of the previous day. The weather was not warm, yet from 9 A.M. it was a day of incessant thunder, chiefly remarkable for the variety and grandeur of the clouds. After breakfast I sailed in close to the builder's yard, and at high water berthed alongside some piles on the beach to have the lugger examined. The noise complained of was discovered to be caused by the mast step having shrunk from the support it originally had from the timbers, which, when she heeled under the schooner's bow with the pressure of her jibboom in the mainsail, threw the entire leverage of the mast upon the bolt connecting the step with the keel and broke it. The bow fastenings fortunately proving intact, the damage to the step was temporarily repaired without lifting the mast. Altogether it was a very satisfactory visit, since, if nothing had



required attention, it was worth while to be armed against suspicions, which, having once arisen after such an accident, would have been intensified with every return of bad weather. As after several hours' thunder and a great storm late in the afternoon it was not improbable the wind would veer to the north and send in a surf, I had a sufficient number of hands in attendance to guard against accident in hauling off the beach at high water.

*Aug. 22nd.*—2 A.M., wind S.W., fine overhead, but an unsettled appearance to windward. Hauled off, and, with a native on board to pilot through the fleet of smacks in the dark, ran out under sail, and took up a berth outside, and below all. When the sail was furled the pilot left me, and I turned into the hammock at 3.30 for a short rest. Notwithstanding there was abundance of cheerful sunshine and very little rain, the appearance of the weather at dawn did not belie itself in respect of wind. Long before I was washed and dressed, the cabin cleaned, and other household duties attended to, a gale set in from S.W., and knocked up a turbulent sea, which, from the necessity of steadying myself and securing everything it was desirable to keep right side up, hampered me greatly in the work. In the preparation and management of breakfast I found even more ingenuity required to preserve capsizable articles from destruction and waste than if blowing hard under way, when their safety is ensured by simply placing them to leeward. Whereas, sheering about at anchor in a rough sea, with no longer warning than is repre-

sented by the swing of a pendulum, the contents of the coffee-pot and the frying-pan are apt to mingle with fugitive crockery—fortunate, indeed, for the proprietor if they meet in a place so little inconvenient to himself as on the floor. If my friends and others who doubt that hard work is really beneficial had been able to see me, wedged securely in a corner by the cuddy doors, enjoying breakfast that morning, they must have been converted into enthusiastic advocates of a theory it was the avowed intention of this cruise to put severely to the test. If I attempted a precise description of the motion of a boat like the 'Procyon' at anchor in a rough sea, it would read like gross exaggeration, since nothing short of witnessing it will convey an adequate impression of its violence. When she sheered into the trough of the sea people watching from the shore wondered the mast stayed in her, and I thought if it had a mind to go this was certainly a fair opportunity.

About 11 A.M. the oyster fleet returned under three-reefed mainsails and spitfire jibs before there was sufficient water for several of them to beat up to their moorings. It blew so hard that the near approach of some of them caused me anxiety lest by any accident they should miss stays, and drift down upon the 'Procyon.' As until now there had been no time to scrub down, I devoted three hours to it, and when in my estimation she was comfortably clean, had luncheon, which, notwithstanding there was an abundance of so-called delicacies in tins, consisted

more often than not of a cold chop or a piece of rump-steak, purposely cooked in excess of the requirements of the previous evening's dinner. With appetite rendered keen by exertion and pure sea air I thoroughly enjoyed this simple fare, provided it was supplemented with unlimited fresh butter and the regulation allowance of "Bass," about which there happened to be a disappointment upon this occasion, owing to the supply in the cellaret having been suffered to run short. To obtain it I must have removed a number of things aft, crept into a place like a dog-kennel, and have remained there a long while repairing stowage—an unpleasant job, which even confidence in immunity from sea-sickness did not tempt me to undertake in the midst of so violent a commotion. Requiring nothing more at Whitstable, and indisposed to be tossed about in like manner during the night, I determined to get under way and seek a smoother anchorage.

The process, resorted to in Dover Bay, of heaving ahead with tackles until the chain was sufficiently short to sail the anchor out of the ground, was repeated with success; notwithstanding, the work was extremely hard, and she "snubbed" severely.

The difficulty of getting under way when blowing hard is not due to the weight of anchor and chain, though, of course, their weight is an important addition. The difficulty consists in forging ahead against wind and sea a dead weight of about 5 tons, which, but for being held by the anchor, would tend from 3 to 5 knots an hour in the contrary

direction. In the absence of wind pressure, or a tidal current equivalent to it in force, the work of weighing anchor is about equal to hoisting the mainsail. "Snubbing" is peculiar to the unyielding nature of chain, and is inevitable when riding short in a sea way. It may, however, occur, in a modified degree, when riding short with rope.

When at last the anchor was stowed and the sails trimmed, I had a trouble with the dinghey, which, being half filled with water shipped during the day, would not tow until it was got rid of by hauling her on to the lee gunwale with her head upwards, and when emptied launching her again suddenly stern first. Everything being now in order, I put about at 5 P.M., and bore away to the eastward under double-reefed mainsail, with the wind on the quarter, glad enough of the rest afforded by a pleasant run of two hours to Westgate, near Margate, where the anchor was let go for the night in tolerably smooth water at the distance of about a third of a mile from the shore.

With the furling of the sails the hard work of the day was brought to a close, and there was nothing to do but attend to the domestic comforts, which consisted chiefly of preparing and then peaceably enjoying a good hot dinner.

Though the numerous lights of Margate make a pretty illumination in the distance, and there is a light visible here and there in the windows of cottages on shore, it is a lonely anchorage, exposed to the North Sea—intolerably dull for anyone whose time

is not too completely and agreeably occupied to care for it. That, however, not being my case, I noticed with admiration the gradual transformation from a mellow-tinted sunset to a beautiful starlight night, and did not for a moment regret there was not a sound to be heard but the souging of wind on the masts and the ripple of the sea on shore.

Some of my readers, judging only by their own feelings, may wonder how it is possible to carry on, and even find pleasure in, such ceaseless work as this. From my point of view, the following irresistible inducements are a sufficient explanation :—

1. Though, manifestly, it cannot under all circumstances of wind and weather be agreeable, it has a favourable effect upon my health, which lightens hardships and renders almost any amount of work tolerable.
2. An insatiable pleasure in the art of sailing, which, especially in strong weather, offers such an endless variety of problems for solution that there is always something fresh to engage the attention, as well as experience to be acquired.
3. A lively interest in natural objects and phenomena, observed to greatest advantage on the sea, which, even in the roughest weather, afford continuous entertainment to those who are not indifferent to their contemplation.

Lastly, respecting single-handed work at sea. In the sensation of entire independence, resulting from justifiable self-reliance, there is an indescribable charm, such as I imagine could be experienced only in a superior degree by a man able, at his will, to accomplish aërial flights.

in any direction—an art which some have rashly essayed, but which there is no probability will ever triumph over the art of sailing to windward at sea.

That those who care for none of these things should voluntarily expose themselves to the chances and discomforts of the sea is, perhaps, even more incomprehensible to me than to anyone else. If—apart from racing and fishing—all who went to sea sympathized with what I consider the legitimate objects of amateur sailing, it would be impossible they should find amusement in wantonly killing and maiming the harmless and beautiful sea birds; much less that, for most inadequate motives, they should think of capturing them with baited hooks, and, even worse still, entangling them in hooks trailed over the stern—methods indicative of callousness to the infliction of torture, which I regret to see instigated by example in a very popular book.

In reference to the apparent helplessness of my position, imprisoned in the cuddy and asleep in the hammock at night, the question has more than once been put to me—If when anchored in lonely places on the coast I had any fear of being surprised by intruders? The fact of being there is a proof that I regard such an accident as highly improbable. At the same time, I occasionally find it conducive to sound and healthy slumber to know that I am not dependent upon the forbearance of any man, if such a foolish thing were by chance to be attempted.

The cause of my work being ceaseless was the exceptionally bad state of the weather, which, after

long continuance, I expected at every rise of the barometer would take a favourable turn. Paradoxical as it may appear, the same cause operated in a compensatory direction, by rendering the general work less irksome than under other circumstances it might have been, since it occasioned so much hard labour in the "marine department" that the ordinary routine, by comparison, became only light and easy employment. How it happened the 'Procyon' was exposed to such an unusual amount of rough weather was this. Unable to forget the month was *August*, and that fine weather was long overdue, also having an intense dislike to harbour work and tidal restrictions, immediately the barometer rose I took up a position from which to make a favourable start for any place which, at the time, might seem desirable; but circumstances beyond my control thwarted me in a manner never before experienced. If, judged by the event, some of the positions I took up seem to have been rather risky, it was always in expectation of the favourable change indicated by the barometer proving reasonably permanent.

Favourable as was the weather for a good sleep, after a heavy nine o'clock dinner early bed was out of the question—even if a thorough clear up, a few pipes, tea, and a little reading before turning in were not according to my notions of comfort indispensable.

*Aug. 23rd.*—When I turned in my impression was that the lugger would remain wind-rodé, but

shortly after falling into a sound sleep I was apprised of her having swung to windward by the dinghey "charging" into the stern and bumping alongside. I anathematized her considerably, but finding that ineffectual to abate the annoyance, turned out, and took her on board. Unable to collapse her on the after deck, and unwilling to waste more time in considering how to dispose of her, I lashed her there, and returned to the hammock at 2 A.M. The morning was superbly fine when I went below, but the next view at seven o'clock disclosed a leaden sky and drizzly rain. The first business after breakfast was to dispose of the folding boat, which, as the barometer was again receding, and the weather seemed hopelessly bad, I determined not to tow astern any more. With a spare spar laid across the coamings of the open part of the lugger for a roller, and a guy rope from the masthead to her bow, I passed her on to the fore deck, where there was room to work, and there folded her, by a method which is certainly ingenious, into the following dimensions—10 feet 6 × 15 inches × 6 inches. In this form I lashed her to the gunwale on the port side forward, where she least obstructed my movements, though her weight was less desirable there than anywhere else.

The next day being Sunday, and fresh provisions running short, it was desirable to make a harbour. At first I had visions of Dover, but as the wind freshened and backed to the southward with torrents of rain, my pretensions abated, and I resolved to be satisfied with Ramsgate. 11 A.M.—Well housed in



waterproofs, I got under way with two reefs down, and, thinking there was no need to hurry over so moderate a distance, ran to leeward, and trimmed sails and helm for sailing herself closehauled, while I took advantage of the copious downpour of soft water to remove the shore stains, contracted at Whitstable, from the lower part of the mainsail. An hour later I passed Margate—which looked anything but the resort of pleasure it is said to be; and in half an hour more, on my very best behaviour at the helm,—for the clouds looked terribly black and angry—emerged from the protection of the North Foreland, and stood on closehauled towards the North Goodwin. A mile or two out, I was so completely overpowered with sea and wind that it appeared as if taking the third reef down would not be a sufficient relief; so, being hungry and indisposed to the exhausting labour of shifting sails with protection so near, I put back, and at 1.30 brought up off Margate with No. 2 anchor and a bass rope.

I was too near the harbour to escape being pestered with offers of assistance, though, lying quietly in smooth water with the burgee and ensign flying in their proper places, and otherwise in perfect order, there was not the least probability that any could be required. Expecting the wind would shift to the northward and send in a rough sea, I wished not to remain anywhere on that coast during Sunday,—certainly had no intention to risk getting my boat knocked about among a crowd of smacks in Margate Harbour; so that the situation was becoming vexatiously perplexing, when,

fortunately, the wind shifted to the south-west, and moderated sufficiently to enable me to proceed.

3 P.M.—Weighed anchor, and bore away for the Foreland, where I encountered a foul wind and an adverse tide. To have “weathered” satisfactorily, a reef should have been shaken out of the mainsail; but the wind continued gusty, and the work had been too hard lately for me to run the risk of having to take it in again; so I made up for deficiency of canvas by shorter boards—in other words, “cutting it exceedingly fine”—which I was enabled to do by a diligent use of the lead every time of standing in towards the cliffs. Notwithstanding this sort of sailing was unlikely to be pursued by a novice, off Broadstairs I was hailed from a pilot boat, which had been in company for some time, with offers to take me into their harbour. As usual with men who consider their services indispensable to the most trifling undertaking, they would not be satisfied with a plain answer—as courteous as can be given in a strong wind—but seemingly annoyed that I did not instantly strike colours and capitulate, wanted to know if “I intended to remain out all night?” to which the laconic reply was, “Can’t say!” The spokesman then insolently added, “It’s my belief you don’t know where you’re going.” It was my belief that I did, and also that Broadstairs was not quite beyond my capacity if it had been desirable to run in there,—but I made no reply. Exposed to the full force of the tide during the last mile, it was 8 P.M. and almost dark when I gained Ramsgate, and luffed up into the “west gully.”

Without in the least intending to depreciate others, I must say that the immediate and obliging assistance of the harbour authorities is worthy of remark. Declining to enter the basin, at my own suggestion I was towed into a berth between the luggers lying at moorings near the lighthouse; where the only drawback to comfort—partially remedied during the night by hauling off with a “breast-rope” on the other side—was rolling, and striking violently against my neighbours’ fenders.

When the sails were furled and ropes coiled, I put out the dinghey to go to market. The night was so extremely dark that in rowing round the east gully at low water to the clock-house, caution was needed to avoid capsizing or damaging my frail bark amid the numerous boats, buoys, and warps. Though unable to impart light, the water when agitated by the sculls was intensely luminous; not with the sparkling phosphorescence of the ocean, but the solid-looking, creamy phosphorescence of decomposed vegetable and animal matter, peculiar to harbours and the mouths of rivers under certain conditions of the atmosphere, and of stillness during the period of low water. If there had been any doubt about the shops being open at that late hour, it was quickly dispelled by the blaze of gaslight and dense crowd in the streets, which presented the appearance of a fair. Having called at the Harbour Office, according to instructions received from the pier men, and made several purchases, I groped my way down the slimy foreshore below the shingle to

the boat, and was right glad to escape to the quiet of my little home and a healthier atmosphere, which, however unobjectionable in the town generally, is abominably vitiated in the neighbourhood of the entrance gates on the quay, especially during the excursion season.

It was fortunate I partook of a substantial luncheon off Margate, seeing that it was past ten o'clock, and dinner had yet to be prepared. For one who never turns day into night, I admit it seems unreasonable to turn night into day; but sleep was so secondary to the business in hand that not an item of the routine described on a previous page was omitted because of the lateness of the hour. On the contrary, I was in a condition to enjoy it even more keenly. To have dined earlier off preserved "haricot mutton" or "stewed rump-steak," both very good in their way, might have seemed more reasonable; but they are not to my taste when, with a little trouble and delay, it is possible to procure fresh meat.

*Aug. 24th (Sunday).*—At last the wind had veered to the northward, and, judging from the fine appearance of the morning, promised a welcome relief to the anxieties of the farmer. But the change was of short duration; for at 3 P.M. the wind was back to its old quarter, and, though a beautiful day, the signs of another gale were unmistakable. To me it was the most discordant and wearisome day of the cruise. A number of fishing smacks belonging to other ports—not that, for a moment, I imagine the

latter circumstance made any difference—had come in and located themselves in my immediate vicinity; so that having no one in whose charge to leave the lugger I was compelled to remain on board. The majority of the crews were young men and boys, who could not have been strangers to the modern School Boards, yet their vocabulary was so restricted as to furnish but one offensive adjective to qualify—not the nouns only, but, far grosser absurdity—every “part of speech”; and one “supplementary” noun, still more offensive, which they seemed to think applicable to everything animate and inanimate under the sun. That these lads are not, as some suppose, on account of evil example at home, genuine objects of sympathy in this matter is clear; for when the same young men, attracted by the strange appearance of my folding boat, came to talk with me, their remarks and conversation were sensible and perfectly free from offence; proving that the uncivilized language they use habitually among themselves, arises not from ignorance, in the sense of not knowing better, but from the less excusable ignorance of considering it “*manly*.” If to the liberal education imparted by the School Boards were added a just appreciation of the value of these objectionable words, and the examination for honours extended to where, when, and how they may be intelligently applied, not only would the interests of education be advanced, but the improvement wrought by the School Boards would be more satisfactorily demonstrated than it is at present.

## CHAPTER V.

*Aug. 25th.*—Blew hard from south-west, Barom. 29·75. Heartily tired of the monotony of a prison life in harbour, and the stupid occupation of fending off my neighbour—with whom, in spite of all precautions, wind and sea brought me occasionally into violent contact—at 3 P.M. I stowed the dinghey as before, took three reefs in the mainsail, and resolved to seek a more agreeable anchorage at sea. With a change of wind to W.S.W. the barometer had slightly risen, and the clouds dispersed, giving promise of a fine night, and, from the anchorage contemplated, an advantageous start for Dover in the morning, if the weather became fair, as I had reason to expect. Supplemented by the surface current, due to the strong up-Channel wind, the tide, setting like a sluice to the north-east, allowed me but a narrow margin to clear the east pier-head; which, however, was passed in good style without shipping any sea. My intention was to make a short board to the southward, and then, on the other tack, endeavour to weather Ramsgate and get into the comparatively slack water of Pegwell Bay. But the sea was hollow and confused—as at such times it always is in that part—and I had to stand on a long while before the opportunity to “stay” so small a craft under short

canvas presented itself. It vexed, though it did not much surprise me, that the three-reefed mainsail, setting so low on the mast, was overmatched by the high chopping sea and strong lee current; so that, on this and the next two or three boards, instead of weathering, she lost ground as far as the Old Cudd Channel buoys. In the sense of continuing "under way," the question, "If I intended to remain out all night?" might have seemed pertinent at this juncture; for the hours were speeding, when I ventured to shake out a reef and, by making short tacks in shore, immediately began to improve my position. Having succeeded in weathering Ramsgate at dusk, I continued beating to windward until 9 p.m., when, by way of experiment, I brought up with the 28-lb. anchor and 30 fathoms of bass rope—keeping the bower anchor and chain in reserve, but ready for instant use if required—on Sandwich Flats, about two miles from Ramsgate, and a mile from the nearest beach.

If, at first, disappointment attended the failure to overcome the adverse influences of wind and tide and sea combined, it was due to forgetfulness of the impossibility of driving by pressure of canvas, as we do vessels of more power and greater draught, a boat not wholly decked through a sea I soon discovered had no "foot" to it. But when more reasonable tactics ensured success, equanimity returned, and I enjoyed a breeze which, if it conferred no more enduring benefit, at least laid a good foundation for dinner.

While the canvas was being furled, the potatoes were "steaming," a method I prefer to "boiling," because they require less attention and, when off the fire, keep in good condition until the meat is ready. If, in reference to the question of "frying-pan" *versus* "gridiron," the former is objected to, I can assure anyone who, temporarily, may have to be his own cook, that it depends upon himself rather than upon the implement, provided a clean enamelled pan is used, and a few minutes of undivided attention are bestowed upon the business in hand.

The motion was of course considerable, but being free from the "jars" of various sorts encountered in harbour, did not appreciably interfere with my comfort. The night was superbly starlight, and owing to the clearness of the atmosphere the view of Ramsgate from the anchorage exceedingly pretty, the windows of the houses, I suppose on account of the latter being crowded with visitors, presenting a blaze of light in addition to the numerous gas-lamps of the town, the whole being relieved from sameness by the powerful red light of the harbour and the green "leading lights" on the cliff. For a time this charming picture was enhanced by a display of coloured rockets, thrown up from Broadstairs, appearing in a line with and immediately above it. If, at any time, the pursuit of pleasure is unattended with vanity and vexation, it is in the quiet enjoyment of a fine sunset followed by a brilliant starlight night at sea. In comparison with the idle monotony, and in some respects hateful experience, of



the past two days, the contrast was so delightful that only absolute necessity could have induced me to return.

Although most particular in calculating the number of feet before letting go the anchor, about 11 P.M. I unexpectedly received warning in the trough of the sea that no allowance had been made for the longer ebb, and consequent depression of tide, due to the strong south-west wind. It being past low water by the tide-table, I had little fear she would actually strand, though the "run" of the sea, now setting almost at a right angle to the wind, forced the lugger to windward of the line of her anchor. The flood soon made, and relieved me from apprehension, but it was a great oversight, and showed that an off-shore wind must not be entirely relied upon for keeping a craft to leeward of her anchor when the sea begins to feel the ground. Barom. 29·85.

*Aug. 26th.*—Turned out in good time to consider the prospects of the day, which took no long time to "sum up." Wind, fresh from south-west—barometer, dull—sun, shining—scud flying fast in advance of a heavy bank of grey cloud in the Channel, from which at intervals issued long low growls of thunder. As Dover was apparently out of the question, and Ramsgate entirely against inclination, the alternative lay between "seeing it out" on the spot, or beating a retreat of twelve miles to Margate Roads. Constitutionally averse to retrograde movements, I chose the former, and forthwith proceeded

to shift my berth into deeper water. As yet the wind was not so strong but that it was possible to weigh the anchor by hand; whereas, had the chain been out, the longer process of "tackling" must have been resorted to. Having brought up again with the same anchor and 35 fathoms of rope, I turned my attention from the threatening clouds above to the more immediately interesting subject of breakfast below, where the kettle was already spouting a cheery jet of steam athwart the cabin.

If I seem to have given too much prominence to the item of meals, it is because I regard their healthy enjoyment as the mainspring of work which otherwise could not have been carried on beyond a very limited time. Thus, in gauging the physical or mental condition of a crew, meals are an unfailing index to the state of the social barometer, discovering the existence of "waves of depression," whether caused by anxiety, debility, or discontent.

Enlivened by a gleam of sunshine occasionally the day was not entirely bad, though the wind was so extremely violent as to cause the lugger to ride to leeward with a great strain on the anchor, when in ordinary weather the tide would have forced her to ride to windward. In addition to a turbulent short sea off the land, on the port bow I had the big "Channel sea" rolling partly athwart wind into Pegwell Bay, the two together creating a compound motion that threw the recollection of the Whitstable anchorage into the shade. Routine work and about two hours' carpentering below furnished plenty of

occupation until four o'clock, when the wind once more veered to the westward with a rising barometer, according to its now almost established daily custom. As fresh supplies were again running short, and marketing cannot be done on Sandwich Flats for love or money, in the hope—if not firm faith—that the clouds had really drained themselves dry and the wind blown itself out at last, I determined upon another advance towards Dover, and at 5 P.M. set the mainsail double reefed for a reach down against tide to Deal. I had 35 fathoms of rope out and not the least chance of getting any of it in by hand as in the morning; so I cast to windward with the sails hard sheeted, and when about on the other tack sailed straight for the anchor, my only difficulty this time being that of overhauling the rope fast enough. The instant it tautened in my hand I “took a turn” and lifted the anchor out of the ground. This was my first experience of rope *versus* chain, which, instead of exhausting me to speechlessness, enabled me to laugh approvingly the while at its charming simplicity and complete success. I used to think rope was used by smacks only in the absence of chain, but now, for temporarily anchoring small craft at sea, am convinced of its superiority, and shall adopt it in future.

Under a brilliant sky, I had a delightful little sail, “gunwale down,” that in the absence of sea-sickness must have approved itself to the most fastidious taste; and that even an “unhappy sufferer” would have regarded as a welcome change who had passed

the previous twelve hours on board. The position I chose was in four fathoms low water, abreast of Upper Deal, and about three-quarters of a mile from the pier. The sea was toning down when I brought up with the same riding gear as before, and, having started my preparations for dinner—which, fortunately in point of time, promised to be on table at a less fashionable hour than usual—proceeded to make snug for the night. A boat had been alongside with a proposal to take me ashore for the trifling sum of six shillings, which, considering the wind was off shore—and excepting a moderate swell on the beach was only like landing at Gravesend—I said would make the few things I required rather expensive. Upon their requesting me to name the sum I was willing to give, my reply was “Nothing.” “Then it’s no use to wait?” “Not the slightest.” “Good night.”

What a superb night it was! One might almost have been excused for supposing it would never rain again—yet the stars were over bright! Excepting for the long easy pitch and roll, I seemed to have come home after the rude buffeting of the day, and to be the centre of an illumination got up for my especial gratification. On the starboard hand were the lights of the town—on the port hand, the lights of between two and three hundred sail at anchor—and astern, the concentrated, but rather faint illumination of Ramsgate, looking not unlike Vauxhall Gardens in the time of their prosperity. I enjoyed the scene thoroughly, deeply, and little cared to think how quickly it could change.

*Aug. 27th.*—I had only just turned out after an unusually refreshing sleep—such as follows a gale and dispersion of clouds, but, with me, never precedes it if the clouds are gathering towards night—when one of my visitors of the previous evening came alongside, and immediately agreed to land me and put me on board again for two shillings. Of course! considering he would have rowed a whole family about for an hour for that money, or even have contended with another boat in a race of a mile out and a mile home to pick up an old box for firewood not worth sixpence. Besides, I could have landed myself for nothing had I chosen to have done so.

Having posted letters and purchased a few necessities, I returned on board to breakfast, right glad to have attended to business first, since it had rained already, and was looking exceedingly dirty in the south-west, with an unmistakably dull barometer.

The wind soon made itself heard in strong gusts from the direction of Lower Deal, and, while attending to my duties below, I felt the lugger rising higher and plunging deeper every minute as the sea came rolling up in constantly increasing volume from the South Foreland. Had not a miserable rain accompanied the sea, I should have found entertainment in watching its effect upon my neighbours; but rain and spray combined were too drenching for me to leave the cabin except on business.

After breakfast I was hailed from a large lugger standing off under stormsails to know "If I would

give them a trifle to take me into Ramsgate?" to which I replied, "I would rather give you a trifle to keep me out." The last words that reached me were, "We'll come alongside," which, though not attempted to be put into execution, I accepted as a warning not to bandy words that, on one side, it might possibly be convenient to misconstrue. My custom is to fly a club burgee, whatever the weather; but to fly an ensign in a gale is extravagant and unusual, unless there is a special motive. I had such a motive now, and ran mine up to its proper place—the mizenmast head; the purpose being to intimate plainly that assistance was not needed, and would be declined. As to my knowledge nothing passed within hailing distance during the next twenty-four hours, I presume its signification was understood; though it is doubtful if, after twelve o'clock, any but a very powerful crew or a steamer could have come, if they would.

The wind increased in force, and gradually southed until it set straight through the Downs with a tremendous sea, which would not have occasioned me much inconvenience—though occasionally the lugger seemed to leap almost out of water with its violence—if the wind had not caught her in that position, first on one bow and then on the other, and caused her to range considerably. The effect of ranging with so large a scope was to expose her broadside more or less to the sea, and cause her to lurch heavily until she regained her position astream of the anchor. To correct this, I set the

mizen and hoisted a small jib as a trysail—sheet upwards and aback against the mast to prevent it being blown to pieces—cast to the westward, and when the sheer had forged her sufficiently ahead, let go a second anchor and hauled down the jib. Paying out 20 fathoms of rope, she fell into her former position and remained tolerably steady for a time with an equal strain upon both anchors. The ropes were “parcelled” to protect them from chafing in the “gammon-iron,” which answered admirably as a “hawse-pipe”; and to prevent the strain being thrown directly upon the short nip of the belaying cleats, a turn was first taken round the mast.

After a substantial luncheon and a pipe, I looked up at 3.30 P.M. to see if there were any prospect of the usual afternoon clearance, and discovered that she had dragged the two anchors in line. As the heavier one, with 40 fathoms of rope, now fairly backed the smaller one, with 20 fathoms, I had no reason to be dissatisfied; for the question was no longer one of personal comfort below, but of holding ground against the wind, which by this time was terrific.

The fleet had increased in number by vessels running in under very short canvas from the Channel; but, to my knowledge, none passed to the southward. Nor is it likely any ordinary vessel did so, since I heard afterwards of a steamer due at Boulogne from the Thames at nine o'clock that night which failed to reach there until twelve hours later; and of a cutter-rigged smack which failed to weather the North Foreland.

Observing that the barometer continued to decline, and that there was no indication of a break in the clouds, it became necessary to make preparations for the coming night, during which, if the wind backed to the south-east without moderating, the anchors would probably have to be slipped, and the sea encountered under way. Moreover, it was certain she could not carry the mainsail, even close-reefed, and that the work of preparation would be far too long and heavy to be undertaken excepting in daylight—especially as the deck was slippery and unprotected with bulwarks.

First, the mainsail had to be unbent from the mast; then, to enable it to be covered and stowed in the berth I contemplated, between the waist coaming and the gunwale, it had to be opened out on the deck, and, notwithstanding its wet and harsh condition, be furled almost as snugly as if it were dry. This, on account of the high sea running, the most trying task of the day, required time and perseverance; but it was accomplished at last to my satisfaction, and the sail lashed securely to the gunwale on the starboard side, where its weight counterbalanced the dinghey and spars on the opposite side. This heavy gear would have been stowed on the lower platform, had not my comfort below and complete freedom from any sort of obstruction been far more important than the trifling disadvantage of a moderate deck load.

To avoid spending more time on deck forward than was absolutely necessary, the stormsail, being



dry and in every way easier to handle than the mainsail, was opened out below and reefed there; then lifted forward and bent to the mast. When the tackles were overhauled and seen to be clear for hoisting almost beyond the possibility of a hitch, and the sheet bent on, I furled the sail and partially covered it—so that there would be nothing to do but uncover, cast off stops, and hoist away. The precaution of covering may seem superfluous, since rain and spray wetted it considerably before the cover could be put on; but if the canvas and tackles had been permitted to harden by saturation the difficulty of hoisting would have been increased, and the latter, probably, have kinked and jammed at a critical moment. The ensign, in a “reasonably” tattered condition, had been hauled down at sunset, and shortly afterwards the riding light got up—which, in spite of the violence of the elements, I contrived to keep burning with steady brilliancy throughout the night by partially closing the ventilator with thin canvas.

Beyond an occasional glance towards the landmarks, to see that the anchors were holding firm, for several hours my attention was so exclusively directed to my own affairs, that if the whole fleet had vanished I should have been unconscious of the fact. It would be absurd to pretend that such work, in itself, was agreeable; yet the pleasure of knowing it was done, and that everything was in a reasonable state of efficiency and preparation to meet a more adverse change, if it should come, was immense.

As with the most highly favoured mortals on shore comfort is only comparative, it cannot be difficult to understand how thoroughly jolly it was below when the stove was lighted, wringing wet garments exchanged for dry, and a savoury rump-steak and potatoes under way for dinner. Besides the powerful beam thrown across the cabin from the stove, I had an oil lamp with reflector at the after end of the cabin, and a candle-lamp forward,—for the more gloomy it is on deck the more desirable is cheerfulness below. Outside the cabin, the larger riding light belonging to the 'Orion,' and specially chosen for duty upon this occasion, shed a strong light over the vessel; its rays, as I sat by the open cuddy doors, seeming to be absorbed immediately beyond the gunwale and the mizenmast in a wall of impenetrable darkness.

Though I have passed many a suspicious-looking night at anchor upon various parts of the coast of Great Britain and Ireland, the situation struck me as novel when at 10.30, in a condition of wistful expectancy, I was tending the sputtering and odoriferous steak, compelled, for the credit of my occupation, to follow attentively and even anticipate the violent plunges and lurches of the vessel,—listening, the while, to the roar of the wind and the dashing of rain and spray against the after bulkhead; and, at times, watching almost with curiosity the sudden depression of the stern followed by as sudden a rise above my head, according to the position she occupied on the passing wave. In such circumstances

it sounds strange that there should be anything short of actual discomfort in sitting down to dinner at a late hour of the night by the open doors of the cuddy; but, excepting the motion, there was none whatever, as the thermometer was fairly high, and the wind too strong from ahead to allow any rain to fall within several feet of the entrance to the cabin. I was very curious to see the barometer—which, from an early hour of the day up to the last time of seeing it, had moved steadily downward—but restrained my curiosity for the present; considering that if the fall were checked nothing would be gained by ascertaining it, whereas if a serious further decline had taken place, knowledge of it might interfere with the dinner, which, with an imperial pint of Bass, plumcake for pudding, and a pipe for dessert, was in every respect a most successful performance.

Excepting as an experiment, there is nothing to be said in favour of risking a gale at anchor; but if for any reason it may seem desirable to do so rather than get under way, the advantage of being wind-rode is great and undeniable. With modifications as to time, the tide, of course, flowed and ebbed as usual; but at no time during the four days it fell under my observation did I perceive any surface current to windward. Throughout this particular day all the vessels I saw were swung to the northward with taut cables; and on the following day, when the wind was more off shore, only a few were partially canted athwart stream. From Monday

evening until Thursday afternoon the 'Procyon' never once swung to the southward; had she done so, and commenced running ahead of her anchor, the position would have been untenable, and I should have considered it "notice to quit."

At midnight the barometer showed a slight improvement, and the rain partially ceased; but there was no change to excuse a relaxation of vigilance, for it was extremely dark, and it was not improbable that a lugger of the coast might at any moment run up inside the fleet, unsuspecting of anything lying closer in. As a boat of 7 tons plunging in a heavy sea with a taut strain on her anchors will not bear a shock, however slight, I paid more than ordinary attention to the riding light, which, though burning well and calculated to last till long after sunrise, I carefully retrimmed at 2 A.M. The wind having gradually veered a couple of points to south-west, and thereby relieved me of any anxiety as to its direction during the remainder of the dark hours, I ventured to turn in; but kept a lantern burning below, and myself in readiness for the deck at short notice. Barom. 29·65.

*Aug. 28th.*—Barom. 29·6, wind south-west by west, blowing hard, very much rain. It was difficult to believe in its continuance—seeing it was supposed to be summer—but when the morning duties were got through, and the weather, excepting that there was less sea at the anchorage, showed no sign of improvement, I began to feel perplexed as to the next move; for tossing there began to be irksome, and I

was determined to have nothing to do with the beach, unless I could land myself, which was out of the question. Two or three large smacks passed down under very short canvas, otherwise business on the water was almost suspended. Had it been fine overhead, there would have been an amusing scene of boats passing under canvas between the ships and the shore; but the gloom and the soaking rain offered no compensation for the risk of another black night at anchor, and perhaps a shift of wind to the opposite quarter of the compass; so I decided to shake the reef out of the stormsail, and endeavour to beat round the Foreland to Dover.

After a substantial luncheon, having seen that everything movable fore and aft was securely lashed, the canvas prepared, and the mizen set, I took advantage of the short lull between the puffs to get the kedge anchor aboard, and then, with the stormsail set, sailed the other out of the ground with very little trouble. These and all other manœuvres strictly belonging to the "marine department" (getting under way on a tideless lee shore without sternway, for instance), carried out with precision, are among the most interesting problems of sea-sailing.

The first half-hour, while standing down close-hauled and heading rather off, was spent in stowing anchors and coiling ropes, of which the largest required to be hove overboard and towed before it would coil into its berth. 2 P.M.—I made a board to windward off Lower Deal, and later another abreast

of Kingsdown, to make final preparations for the next two hours' work, which would assuredly try the lugger's powers to the utmost. Having seen that the lower tack was home to the last inch possible, I clapped a tackle on the fall of the halyards, shook up in the wind, and gave the yard an extra bowse up until the sail stood like a board. The gear need be good to stand such treatment; but an ill-standing sail to windward—especially when, without stopping her way, a craft requires to be temporarily relieved from overpowering pressure by judicious "lifting"—is an abomination, and not unlikely to lead to a vessel becoming unmanageable; since it is impossible to luff for a breaking sea without violently flapping the canvas, and paying off broadside to the sea the moment headway is lost.

With colours flying and everything done I could think of, I hoped she would not disappoint me, as on the occasion of leaving Ramsgate; albeit, the fault after all was mine for not giving her the stormsail, which, though in area only equal to the close-reefed mainsail, is far more powerful in heavy weather, owing to its 7 feet greater hoist rendering it impossible to be becalmed to any appreciable extent by the sea. (From the deck the hoist is 18 feet, and the peak of the sail above the waterline 24 feet.)

The tide was past two-thirds ebb, when it should have been visibly setting to the southward; but, with the exception of one here and there partially canted, vessels remained swung to the northward. Protected by the cliffs of the South Foreland, from

which the wind came down in violent gusts, off Kingsdown the sea was moderate; though passengers unaccustomed to it, had there been any, might have been of a different opinion. But with every cable's advance to the southward, the lugger began to leap higher and plunge deeper, until, exposed to the full drift of the Channel, she needed her best powers and all the assistance I could give to enable her to surmount the towering sea, which but for occasionally throwing her head into the wind and cleaving the breaking crest "end on," would have overwhelmed her in a moment. Having no one else to speak to—though it is uncertain if that would have made any difference—I encouraged her as one does a horse, and, not for the first time, found she understood me well.

After thirty hours' rain, a meteorologist with no more pressing subject to engage his attention might, from the heavier downpour, clearer definition, and more threatening aspect of the clouds—appearances which indicate a break up into squalls—have predicted at least a temporary cessation before sunset. This actually occurred, but not in time to benefit me. On the contrary, I had the six hours' rain required to make up the day and a half condensed into two, which searched my damaged waterproofs to such an extent that I welcomed, rather than otherwise, a drenching stream of salt spray from the weather bow to mix with it, and make it more healthy.

Keeping a vigilant watch on the sea, and not for an instant unmindful of the irreparable mischief that could be wrought on an undecked craft by a







"FIVE MILES MORE TO DOVER."

*To face page 101.*

miscalculation or inadvertence, I stood on until the easternmost cliffs were four miles astern; when I put about, and—with a trifling lee helm—hove-to awhile, to get rid of the water, that in spite of every precaution it had been impossible wholly to exclude. This done, there was another reach of five miles to Dover, which was accomplished in good time, notwithstanding the canvas was kept constantly “lifting” to free the lee gunwale; and the numerous delays occasioned by luffing—even to the extent of heaving-to—to meet the lofty curlers, which gave her such terrific lurches that everything possible to unship or break away did so, and it was necessary to hold on tight to save being shot out to leeward. The effect of this unavoidable “lifting” and “luffing” was to bring the Admiralty Pier so far under the lee, that the lugger could have weathered it with a wide berth had her destination been beyond. Fortunately it was not—as will presently appear; and at 4.30 p.m. she bounded off the last big sea into the comparatively smooth water of the bay. As, in so violent a wind, the attempt to beat into harbour at low water would probably have been attended with some vexatious incident to mar the day’s success, I sailed about for an hour in the bay—without easing the sheets, which had been undisturbed since the sails were trimmed off Kingsdown—and took the opportunity, when she was running before the wind and tolerably upright, to pump her out. 5.30 p.m. —Went into harbour, and moored alongside a Channel steamer.

Shortly after my arrival in the bay a large pilot lugger I had observed beating to windward under double-reefed foresail and mizen came in and brought up—to which vessel, without doubt, a man previously referred to belonged. His business on board the steamer to which the ‘Procyon’ was made fast was to convince me of the mistake I had made the previous day in declining to give them a “trifle” to take me into Ramsgate. A bystander suggested that a Dealman’s trifle might possibly have been “five-and-twenty pounds,” if, under the circumstances, any of them had been once admitted on board—which, judging from his offensive manner, I thought highly probable. Considering that Ramsgate was precisely where I had left it so recently, the acceptance of their offer would have been absurd. At the same time, without practice, no one would be likely to steer a strange boat safely with a yoke in a heavy sea, so that, as any service they contemplated rendering which could entitle them to a high reward must have been attended with danger to themselves, it is difficult to see how in any sense it could have been beneficial to me.

Although, to my regret, the result of this day’s work was to bring the cruise abruptly to an end, in point of time and distance against adverse influences—regard being had to the small size and weight of the boat—it was one of the most successful and interesting experiments I remember. The distance, 9 nautical miles for a steamer following the coast, and 13 for a boat under canvas sailing up to four

and a half points with the wind south-west by west, was accomplished in two and three-quarter hours, including the coiling of ropes and the numerous little stoppages related. Under a whole mainsail, with moderate weather and an average tide, the difference in time could not have been great.

Knowing it was impossible to pump dry under canvas in a sea-way, I pumped her again in harbour; but what with dinner, furling canvas, docking, &c., the quantity of water failed to attract notice. Having, with the exception of an hour at Ramsgate and an hour at Deal, been on board for a week, I sought a little change on shore, chiefly at the club; and on my return at 11 P.M., more out of curiosity than as a measure of prudence, again tried the pump. Finding the water flow freely, it occurred to me to count the strokes, which, to my astonishment, ran up to nearly 1500 before she was free. A handier little pump was never put into a boat, but its power is insufficient for an emergency—especially in the event of shipping a heavy sea—and will be increased. It can be worked deeper and slower with the same result; but to keep the barrel full and a steady flow through the nozzle (or inch discharge pipe), the easiest work is 90 strokes of the brake a minute, which, by experiment since tried, is found to deliver  $4\frac{1}{2}$  gallons in that time. Thus the quantity leaked in five hours was 75 gallons (equal to a dead weight of  $6\frac{1}{2}$  cwt.), which required 17 minutes' work to pump out. These particulars are mentioned in view of an incident which occurred later.

This was not a very serious quantity, but as it proved mischief had been done somewhere, I raised the cabin floor with a chisel, removed the ballast forward, and having ascertained there was no fault there, concluded—rightly, as it turned out—that in the heavy lurches to leeward on the passage the ballast had damaged the fastenings of the keel case. Happily the case was so supported by standards and transverse bearers that it could not break away; at the same time, it would have been the height of imprudence to risk any more sailing to windward, or anchorage off the coast at night, until it was repaired.

The account of the last seven days shows the exceptional character of the weather that prevailed every day but one. In the daytime of Sunday the 24th, or on any night excepting the 27th, the passage from Whitstable to Dover could have been done with ease; but I had no motive for sailing on Sunday or during the night, and was content to take my chance during reasonable hours of the day. Though a week of dreadful rains, hard winds, and little sunshine, it was anything but dull, excepting in harbour. On the contrary, there was such abundant employment of a congenial nature that the clock was always "too fast," and the number of hours spent in hammock far below a landsman's requirements. Amongst the stores laid in and preserved in tins were cake, jams, French chocolate and bonbons, which would have seen the light the first week only to be thrown overboard, but latterly had come to be

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highly prized. The fact is if, from causes explained, I failed to visit the parts of the coast contemplated at starting, the chief object of the cruise was attained, viz. a condition of health for which nothing was too hard, to which nothing came amiss. Barom. 29·675, showed but a slight improvement since the morning. All night and throughout the following day it blew hard from the westward, with squalls and heavy rain at intervals.

## CHAPTER VI.

*Aug. 30th.*—Wind W.S.W., very fine, with a rising barometer. Greatly inconvenienced by soreness of the hands and muscles, the former of which I endeavoured to cure with spirits of turpentine, I purposed resting at Dover until Monday, but considered that the opportunity of moderate weather to reach the builders at Whitstable should not be neglected. The fair weather for which everybody had been looking so long had really set in at last, not quite too late for me, because to the damaged keel case a quiet passage was a necessity. In brilliant sunshine and the clearest atmosphere imaginable, the coast looked so charming that the day would have been one of great enjoyment, had not regret at being compelled to leave it been aggravated by a series of vexations more or less serious, of which failure to get any breakfast was not the least.

The determination to leave was taken suddenly, when there was barely time to get provisions from the town, and pass into the outer harbour before the dock gates were closed. My intention was to hang on to a buoy, have breakfast, and put everything in order before sailing. But in an evil moment the old adage came into my mind that "time and tide wait for no man," and I resolved to do all this under way,

forgetful of the swell in the Channel from the bad weather of the previous day. Running dead before the wind with a moderate breeze and the whole mainsail, after clearing the harbour the helm could not be left a moment without the swell causing the lugger to take a violent sheer. The bay was scarcely crossed when, during a short absence, she gybed and capsized the petroleum stove, that in the hurry of leaving I had forgotten to secure, making an offensive mess on the floor of the cabin, which was troublesome to clean and annoyed me considerably. The 'Procyon' has a spar 21 feet long, to be used as a bowsprit in light weather at sea, as a ridgepole for the awning in harbour, or to boom out the mainsail when running before the wind. For the latter purpose it is handy enough in smooth water, but with no one to steady the helm or the mainsheet while the lashing was put on, it cost me a quarter of an hour's hard work to get it rigged out upon this occasion.

The wind was puffy and too light for the impatience of a hungry man; so that it was one o'clock, or three hours after the start, when, with the wind still aft and fresh, I ran suddenly and most strangely across a strongly defined line on the sea into a flat calm off the North Foreland. Immediately this occurred I unshipped the boom, sheeted the sails, and had a good luncheon at the helm. In about half an hour a fresh breeze sprung up again from the south-west as curiously partial as any I remember to have witnessed. Instantly it reached me I made a



short tack to windward of the "Longnose Ledge"; and when about again, lay closehauled along the coast, "gunwale down," in the direction of Margate; leaving vessels, not more than half a mile to leeward, with the wind blowing from the cliffs directly towards them, hopelessly becalmed until they were "hull down" in the distance.

To hold the breeze I had to keep the chalk ledges so close aboard that the heel of the drop-keel (18 inches below the main keel) occasionally touched the longer projections. This in smooth water was perfectly harmless, its action being simply that of a "tell-tale" to warn me a few fathoms farther off. It was fine fun and most successful while there was a hard bottom to deal with, but off the Reculvers, near the period of low water, and fully three-quarters of a mile from the shore, I had the misfortune to cut into an outlying bank of stiff clay, which held the drop-keel firmly and defied every effort with tackles and levers to force it up. Under the circumstances there was nothing better to do than exercise patience, light the stove, and prepare dinner. If it be true that "it is ill working on an empty stomach," it was indeed fortunate I thus utilized the time; for while some fine mutton chops and potatoes were being disposed of, though she made no "list," such work as I had never seen before, and never want to see again, was being cut out for me.

When a boat is aground and the breeze fresh there is a peculiar "slopping" sound caused by the ripple striking her in the "run" or under the

"bilge." Such a sound had been audible for some time, and though it grew louder and seemed nearer, as it would do supposing the tide to be falling, I attached no importance to it. The first course was got over, and the second of cherry jam, &c., was about to commence, when I was startled out of propriety by the water coming through the cabin floor at my feet.

All alone, with the prospect of so much trouble ahead, if the greatest delicacies of the season had been spread before me I could not have swallowed another mouthful without suffocating. The first thing was to take up a trap in the waist platform, notice the height of water on the ballast, and see if I could gain upon it by pumping. Finding this practicable I returned to the cabin, hastily washed up and stowed away the dinner things, and then settled down to work. The tide was not falling, but flowing against her starboard side, and apparently, when she did move, forcing her upon a shoaler spot of the bank. This was the sorest point of all, and occasioned the bank and my own incautiousness for getting there to be so soundly rated that I lighted a pipe with no other object than to preserve peace and quietness—in other words, to check the flow of useless anathemas.

The shaft of the keel case into which the pump discharges is 9 inches above the waterline. This is the precise measure of the further depth to which the boat could possibly be immersed without the water overflowing there and foundering her. As

2½ tons of ballast and stores immersed her 3 feet, it can scarcely be wrong to assume that an increase of less than a ton and a half would bring the water to the top of the shaft, and render the pump useless, while the gunwale would still be 15 inches above the waterline. That the shaft was not constructed higher was my fault, since while I considered it high enough for safety, undoubtedly too much regard was paid to neatness of appearance. Hitherto it has proved more than equal to every requirement; but from recent experience, acquired during the last days of this cruise, it is easy to imagine a case in which a few inches more height might be desirable, and I have ordered the addition to be made.

It was 6.15 when, having hauled down the ensign, I took my station at the pump, and seven o'clock when she came off the bank and allowed the keel to be partially hauled up. The extent of the damage being unknown to me I resolved, if the pump sucked before reaching Herne Bay, to endeavour to get her home, discharge the stores, and return to Whitstable, if not, to make the builders' yard at the latter place as soon as possible.

That the labour would be severe was certain; so, to reduce the chances of a breakdown to a minimum, I worked systematically from the commencement two hundred strokes right and left hand alternately, sometimes "forehanded," sometimes "backhanded," at the same time steering the lugger closehauled in the direction of Warden Point, Isle of Sheppey.

Fortunately unable to see the amount of work before me I laboured assiduously in expectation after the first hour that every minute would be the last. Already, under the conditions before stated, enough to founder her had been thrown out, and Herne Bay was not reached. After the latter town was passed, desiring not to attract attention and invite questions, I had a rest of two or three minutes while a boat was passing in the opposite direction, once knocked off to light a pipe, and once to procure a mug of tea. With these exceptions, amounting in all to about ten minutes, the regular discharge of  $4\frac{1}{2}$  gallons per minute was steadily maintained to the end.

The night was beautifully fine and moonlight, with a pleasant breeze that just enabled me to lay up for Whitstable Point. At nine o'clock, three hours from the discovery of the leak, the pump sucked, and shortly afterwards, the tide not having risen sufficiently to enable me to round the Point inside the "Street" Shoal, she took the ground. The drop-keel being now up and the main keel protected with a half-inch iron band three inches wide, it was immaterial how often she grounded, provided the water were smooth. The motive for taking this course was to avoid running to leeward round the "Street," and having to beat up the "Swale," which would have been useless in every way; since while there was insufficient water at the Point, there was none at the builders' yard, and the occasional pauses of three or four minutes released me from the helm. During one of them, attracted by the conspicuous

whiteness of the sails in the moonlight and the sharp "click" of the pump, a man pulled off in a boat, who, but for a job in which he was engaged, would have accompanied me through the fleet of deserted smacks, a species of pilotage that with their long projecting bowsprits and a foul wind I rather feared. However, there was no alternative; so after a couple of boards to windward I sailed into the midst of them, and luffing for some and bearing up for others, got through all clear and anchored off the yard at 9 P.M.

First the sails were made up and covered, and then, to enable her to stand upright on the hard ground when the tide fell, the legs—oaken supports 5 feet long, bolted to the sides and kept in position with guys—were put on. This, with her jumping about, was a long and heavy job without help to steady them while the bolts were being driven. When, except pumping at intervals, there was nothing more to do, I lighted the stove, and though at first inclined to go in for invalid fare, altered my mind, and at 1 A.M. entirely made good the missing breakfast of the previous morning, coffee, fried ham, pipe and all. By 3.30, at which time the leak had declined to 400 strokes an hour, she settled on the ground and allowed me to turn in.

As, with a view to its improvement, I considered it worth while to ascertain the capacity of the pump, the nozzle was forced out of the head of the keel case when she was beached in the morning, and with the assistance of others it was tested several times

by a proved measure and a watch. From this data it appears that the quantity of water thrown out before the pump sucked the previous night was 675 gallons = 2 tons 18 cwt., and during the following six hours before grounding 150 gallons = 13 cwt., amounting in all to a deadweight of  $3\frac{1}{2}$  tons. For sufficient reasons it was desirable to postpone the beaching until next day, but the sea was rough, and it was not safe to delay a tide.

Thus ended an accidentally contracted cruise of rather more than three weeks, out of which not more than twelve nights were spent in harbour, that, in an equal space of time, for continued violence of the elements and hard work, has not been exceeded in my experience. If I may be permitted to allude to another adventure that undoubtedly seems more severe, it should be remembered that the time extended only to a week; that I had a powerful winch and suitable appliances for the work; that there was more space, and the weather less violent. Besides, aware how serious it would be to get ashore or to meet with an accident of any description, I scrupulously kept to deep water, and being in a powerful decked vessel with no centreboard complications, had no abominable pumping to do.

## CHAPTER VII.

SEVERAL years ago the subject of collisions at sea began to attract my attention. During the early part of 1878 I expressed my thoughts on the subject, and made practical suggestions in an article under this heading in a book called 'Orion,' of which, far from seeing reason to recant a single word at the present moment, every suggestion and every argument has but increased in force with the numerous terrible catastrophes—amongst them that of the 'Princess Alice'—which have occurred since it was written. More than elementary treatment of so large and difficult a subject was not advisable there; but I trusted sufficient had been said to attract the attention of gentlemen of influence more capable of dealing with it than was possible to one in my private position.

My next effort in type was a pamphlet, entitled 'The Rule of the Road as it affects all who travel by River or Sea,'\* in which the subject is more exhaustively treated, and the merits of numerous suggestions for varnishing an evil requiring radical treatment—of which some were only published in the daily journals, while others were presented for

\* Published in December, 1878, by Pewtress and Co., 15, Great Queen Street, Lincoln's Inn Fields, London.

the consideration of the "Thames Traffic Committee"—are discussed, and, I trust, by fair argument shown to be either impracticable or positively mischievous.

The largest number of these suggestions appear in a book called 'Observations on the Rule of the Road at Sea,' published (*in his unofficial capacity*) by Thomas Gray, Assistant Secretary of the Marine Department, Board of Trade, whose permanent official position would, I feared, procure him such preponderating influence with the non-nautical members of the Government and the Thames Traffic Committee, of which he was a member, that I forwarded to the Board of Trade the article in 'Orion,' the pamphlet, and a copy of his own book with the passages to which I desired to call attention marked in the margin.

Later on, having noticed the difficulties under which witnesses laboured in cross-examination, I forwarded three letters on the points as they arose; so that valid objections to those I knew to be mischievous should be, at least, succinctly stated in writing. For these I received courteous acknowledgments, and an intimation that they would receive attention; and as their tendency was only to prevent evils which, in spite of determined efforts in the contrary direction, happily have not come to pass, I have no reason to believe they did not.

It cannot but be disappointing to all who are aware of the serious loss of life and wasteful destruction of property by preventable collisions, to observe



the complete apathy on the subject which has succeeded the violent outburst of sympathy and excitement consequent upon the running down of the 'Princess Alice,' and the drowning of more than 700 people. When we remember the meetings, committees, eloquent speeches, official inquiries, and voluminous reports of that time, it is more than a reproach to a Christian nation which boasts of its humanity, it is a national disgrace, that no remedy has been found for an admittedly increasing evil that—independently of "missing ships," which average 101, and 1100 lives—in the pamphlet, I have shown involves a known average loss of 150 lives and two and a half millions sterling annually. How many of the former collide on dark and tempestuous nights, and grind each other to destruction in a heavy sea, must always remain matter for conjecture; but, probably, the proportion "missing" from this cause is very considerable.

In the earlier days of railways, when two trains were approaching a junction, or a crossing, the responsible conductor or engineer of each used to argue that it was impossible to stop his train. Being equally clever and ready of resource, each used to put on steam, under the impression that he would head the other, and thus avoid a disastrous collision. The result of exercising discretions of this sort, which would have been good had the idea occurred only to one of them, was so terrible, that, after a few examples, the authorities interfered and forbade any crossing of metals until affirmative signals were in their favour. Is there no lesson here? It is

precisely in this manner,—precisely from the same insane mode of reasoning, that a large majority of the collisions between steamships occur ! If, immediately it was perceived that the course of two steamships would bring them into proximity, both eased or stopped their engines, until, by extending a White flag over the side from the bridge, or, exhibiting a White light over the Red or Green, an understanding was established as to the side each would take, there would seldom be a collision at all, or if there were, it would be only of a trivial nature.

Every possible objection to this common-sense principle is so exhaustively treated in the pamphlet that it would be waste of labour to argue them entirely over again, notwithstanding I may refer to a few points presently.

If for the paltry consideration of a few minutes gained to money-making companies, captains, and pilots, our rulers and the nation are determined to make no effort to arrest this needless cruelty to sailors and passengers by sea, I fear there is but a faint hope that anything I can say will lead to an improvement. Still, hope should not be abandoned while societies flourish whose object is the protection of the lower order of creation from pain. For, meritorious as they may be, one cannot but feel how trivial are their aims compared to the saving of human life, ruthlessly sacrificed for the triumph of an idea and of imaginary gain ; but, in truth—apart from the thoughtless indifference to human suffering—to the great pecuniary loss and injury of the nation.

The number of collisions in a year is about 1500 ; of which about two-thirds occur in the home districts and one-third in foreign parts. In clear weather by day and night the proportion is nearly two to one as against dark and hazy weather. And almost as many occur when the sun is above the horizon as when it is below it. These remarkable facts should be remembered when those who would profit by its aid in rapid steaming talk of the electric light for ships ; which, though it may perhaps illumine their own path, as do the brilliant lamps of carriages in a dark country lane, will blind everybody else, and prove a positive curse to all other vessels. Moreover, the mast-head light being visible at the unnecessary distance of ten or fifteen miles will certainly lead to more or less confusion with the Trinity Lights, and occasion many accidents from which careful navigators are now exempt. Instead of being encouraged, an electric light at the mast-head should be absolutely forbidden, unless carried in "ground glass," in which case, I believe, it might be useful and unobjectionable. Deficiency of mast-head light in steamers has seldom, if ever, been the cause of collisions ; and the figures I have quoted from official returns prove the truth of the assertion. Only when it is proved that few collisions occur with the sun above the horizon, will it be reasonable to discuss the necessity of increasing the power of ships' bright lights. The true cause of collisions by steamers is reckless haste at all hours, and under all circumstances ; for which, before we have many more

appalling catastrophes to lament, it is to be hoped public opinion, finding expression in Parliament, will compel a remedy to be found.

If the insertion of the "running down" clause in policies, whereby 75 per cent. of the damage inflicted by a vessel is guaranteed to the owners, were declared illegal, and if the widows and relatives of the negligently drowned were able to sue shipowners as they now do railway companies and carriage proprietors—would there not be an immediate and considerable decline in the number of collisions? The money value of a few minutes sacrificed in ensuring safety would be repaid tenfold in the reduction of insurance premiums. And to those who know not which to value most, the 150 lives or the two and a half millions sterling annually wasted in the deep sea, it should be satisfactory to know that there would be an immense saving in both.

In reference to the imaginary difficulties of avoiding collisions, let it be supposed that captains owned the ship and cargo, that there was no such thing as insurance, and that collisions involved their ruin. Would they consider the loss of a few minutes an intolerable sacrifice if it insured safety? Would there then be any difficulty about stopping and reversing their engines immediately a doubt arose as to their ability to pass clear of another vessel? Would it then be too much trouble to indicate by such a simple signal as a flag or a lantern which side they contemplated passing? No! Even hours, instead of minutes, would not be too great a sacri-

fice; for they would have but one all-absorbing thought, to which every other consideration would be subordinate,—the safety of everything and everybody under their charge. From a moral point of view, it is not satisfactory that the safety of human life should depend upon the prospect of personal pecuniary loss; but that it does, is so undoubtedly true, that, for the security of our maritime population, its destruction should be made expensive,—certainly not cheap, as it is made by the iniquitous running down clause;\*—and it would not be necessary to render it more severely punishable.

If I were about to advocate new rules, which I am not, the difference in principle could hardly be greater than already exists between my views of the construction to be put upon the present Steering and Sailing Rules, and those that may be assumed to prevail at the Board of Trade, while Mr. Gray's 'Observations on the Rule of the Road at Sea' are permitted to circulate without an official disclaimer.

The fact before mentioned, that collisions in clear weather by day and night are in the ratio of nearly two to one as against dark and hazy weather, proves incontestably that the majority of accidents occur when there is least excuse for them, and that they are due to excess of confidence in approaching each other at high speed, followed by doubt and confusion at the last moment.

Separately and critically examined, the Steering

\* Briefly criticised in 'Orion,' p. 151.

and Sailing Rules are not only expressed with admirable simplicity, but they are reasonable and intelligible in the highest degree; and where in 'Orion' I say they are faulty, I mean faulty in the order of their arrangement, and from that cause inefficient.

Of the four articles, numbered 13 to 16 inclusive, which apply exclusively to steamers, the first three are strictly Steering Rules, which presuppose continued speed to carry them out. The fourth, Art. 16, "Every steamship when approaching another ship, so as to involve the risk of collision, shall slacken her speed, or, if necessary, stop and reverse," cannot in the same sense be considered a Steering Rule at all, and the effect of placing it after the others is to lessen its value, and convey an impression that there is no necessity to act upon it until the Steering Rule applicable to the case has been tried, and is perceived to be about to fail. No one can doubt that this is the construction put upon the Rules by the Assistant Secretary to the Board of Trade, author of the 'Rules in Rhyme,' who by the first line—

" Meeting steamers do not dread  
When you see three lights ahead,"

encourages the meeting of steamers with a degree of confidence which is proved by evidence taken in Courts of Inquiry to be exceedingly dangerous; and then, in accordance with the order of arrangement above, having assigned Art. 16 the last place in the Rhymes, he practically still further weakens its pre-

cautionary character by adding a proviso (in italics) which is not deducible from the wording of the article itself, and which implies that the necessity for acting upon it will be quite exceptional—

“In danger, *with no room to turn,*  
Ease her!—Stop her!—Go a-stern!”

These Rhymes, published by an officer of the Board of Trade, carry with them an appearance of official sanction which causes them to be accepted as an authorized interpretation of the Rules; so that in their character of “aids to memory,” to whatever extent they may differ from the intentions of the authors of the ‘Rule of the Road,’ they are more powerful for good or evil than the Rules themselves. Hence, as might be expected, *with room to turn,* the practice in conformity with this interpretation is first to act upon the Steering Rule applicable to the case. If both captains happen to take the same view of the situation, they save two or three minutes, and there is no harm done; if otherwise, the result appears in the enormous annual list of sunk and damaged to which I have referred.

Anyone giving due consideration to the increased length and weight of modern steamers, and the extended curves they make in the performance of their evolutions, cannot fail to perceive that the danger of approaching each other with any doubt existing as to the side on which they will pass must be considerable; for once the ship’s head, in obedience to the helm, has fairly commenced casting in

a wrong direction, the chance of rectifying the error by reversing the helm is so small, that perseverance in the wrong course under full steam power is preferred as the most likely means of escape. "Meeting steamers do not dread" implies that there is no danger in doing so; and inspires a degree of confidence in the protection afforded by the Steering Rules which is not justified by experience; for the fact of its being a position much to be dreaded is established by the figures I have quoted, and has been proved by overwhelming testimony in many a Court of Inquiry. That casualties of this nature will occur is undoubtedly true, but that is no reason why the nation should not insist upon something being effectually done to reduce their number.

The principle I am recommending, as contradistinguished from that which has proved so disastrous to life and property, is contained in the following suggestions; where by a simple alteration in the arrangement of the 'Steering Rules, and a corresponding alteration in the wording of the Rhymes, the Rules will cease to admit of the dangerous interpretation that has caused so many accidents, and will become more stringent without altering the wording of them at all.

In the proposed alteration (face to face with the original, see Appendix, p. 140) it will be seen that Art. 16, which in the present arrangement corresponds to the "General Caution" in the Rhymes, will be Art. 13—that is, will be placed before the three Steering Rules which apply exclusively to steamers;



a change which, from my point of view, materially alters the spirit of them; and implies that in cases of doubt—which in meeting ships *invariably* means danger—captains or others in charge will be expected to see that the ships shall clear, and not to rely solely upon the protection afforded by the Steering Rule applicable to the case—in fact, that to stop the ship shall be their first thought instead of their last; and that they shall not be allowed to stake the safety of passengers and crew, and a valuable ship and cargo, against such an unimportant interval of time as would be necessary to ensure absolute safety. For brevity, and to avoid confusion, I have quoted those articles only which are material to the case in point.

Let me show that under any system even the most skilful and self-reliant must inevitably have doubts.

If two steamers holding their course would pass each other at a safe distance, the Rules do not apply to them at all; but if two steamers holding their course end on, or nearly end on, would come into collision, then, however well the Rules may be understood, the situation is *dangerous* until it is actually perceived that they will clear, for not only may there be no proper look-out on one of them, but there ever must be a chance of difference of opinion as to the propriety of porting or starboarding the helm, not only between the captains of the two ships, but also in every man's own mind. In cases where it seems perfectly clear that the helm should be ported or

starboarded, the chances against an accident are many; but a man must be wilfully obstinate, or blinded by prejudice, who refuses to see that midway between these two decided courses there *must* be a line of doubt; and in inverse proportion to the experience, quickness, and intelligence of the man who is suddenly called upon to exercise his judgment in a case difficult to decide, is the breadth of that line of doubt. In minds naturally indecisive it is considerable.

In advocating the sacrifice of a moderate interval of time to ensure safety I am not advocating that self-evident principle which is dictated by the first law of nature, but an enforced regard for the safety of others, which is rendered necessary by the feverish haste of the times, and which is quite as mischievous in navigation as it once was in railway management, and would be again if legislative supervision were withdrawn. Apart from considerations of humanity, even from a pecuniary point of view, the returns prove that safety would be cheaply purchased if it cost a delay of hours to attain it; how much more, then, when it can be secured with certainty at the occasional sacrifice of only a few minutes?

How divergent are these views from those which are expressed in Mr. Gray's 'Observations on the Rule of the Road at Sea' the following extracts, numbered 1 to 6, will show. The italics are my own:—

1. "As another instance (*of something higher, something yet to be attained before perfection is reached*, p. 22), it is a matter of fair question whether the time is far distant when large ships, those

monsters of 2500 tons and upwards, must be specially recognized, and other and smaller craft must be made to get out of their way (p. 23).

2. "The time may not be long in coming when small craft, especially in estuaries and rivers, and near the coasts in waters much frequented, will have to keep out of the way of large ships (p. 23).

3. "At one time the feeling was that 'those dreadful steamers' ought not to be allowed to go careering over the sea, taking charge of everything (p. 25).

4. "We find also that steamers are gradually being looked upon as less and less criminal. It was the fashion to regard the steamship as wholly in the wrong if she got into collision, as she, having the motive power within herself, could, it was thought by the *then* assessors, get out of the way of everything (p. 21).

5. "We need not look for improvements in this respect by alterations in the International Sailing and Steering Rules, but rather to the awakening of authorities who have power to issue rules for safe navigation within their jurisdiction, and to the decisions of courts assisted by assessors, who themselves know the practical difficulty of handling large modern ships. *A feeling will gradually be created as the masters of these ships are promoted to be assessors*, which will spread itself, and help to lead to reform and relief in the direction indicated (p. 24).

6. "Again, as an instance of a looming question:—A feeling is gaining ground that the Board of Trade should be empowered by law to issue certificates of competency for officers and masters who have served wholly in steamers. A proposal to that effect was made a few years ago, but was opposed on the ground that service at sea in a sailing ship was thought to be necessary to enable a man to know how to manage a steamer" (p. 24).

Happily the law of the land is opposed to a doctrine so convenient for the strong, so perilous for the weak, as that "might is right"—a doctrine so utterly repugnant to the feeling of Englishmen that, in reference to his constant endeavour to make public feeling responsible for his remarks, the writer must be labouring under a delusion. Such writing as the above, instead of inculcating care in the handling of

steamships, which, recklessly managed, are engines of destruction as terrible as railway trains, instils into the minds of the rising generation of "steaming captains" that the nautical assessors of the future, who have themselves experienced the annoyance of being compelled to study the convenience of others, may be expected to take more enlightened views, and judge more leniently than their predecessors, the misfortunes in which only weaker vessels may chance to be the sufferers.

The difficulties of attaining to the degree of perfection in steam navigation hoped for in extract 1 are insuperable, unless manslaughter is to be constituted a venial offence; for there are no other means of compelling small craft to forego their rights, *even if circumstances permit of their doing so*, excepting to run them down, and for that the nation is certainly not prepared.

Two or three examples of the lamentable working of these suggestions, where there was unlimited sea room, will show how absurd it is to attempt to compel small vessels, dependent upon wind for their motive power, to keep out of the way of ships having the command of steam, and able to choose their own course. It is not more reasonable than to expect the tortoise to avoid the hare!

On the 31st October, 1878, the coastguard cruiser 'Fanny,' being then on the S.E. coast of Ireland, made an effort "*to get out of the way*" of the steamship 'Helvetia,' bound to America, her endeavour so to do being put forward as an excuse on the part of

the steamer for running her down. Seventeen men drowned!

In the 'Times' of January 25th, 1879, the following paragraph appeared:—"Drowned.—Yesterday morning a fishing-boat was run down off Stonehaven by the steamer 'Countess of Durham.' The boat was proceeding to the fishing ground under easy sail, and *in attempting to get out of the way of the steamer* she did not move fast enough, and was cut in two. Two were saved; three were drowned!"

March 14th, 1879.—The pilot cutter 'Edinburgh' was run down off Dungeness by the steamship 'Severn.' Fifteen men drowned! It was stated that all the men were married, and that forty children were left fatherless by the disaster.

"These atrociously cruel accidents—which are more frequent by far than is generally supposed—could have been easily avoided if the men in charge of the steamers had been willing to sacrifice two or three minutes of their comparatively worthless time. In neither instance is there an opportunity of exciting a feeling of sympathy in favour of the steamer as against the small vessel by imputing to the victims either incompetence or wilful obstruction, for in each case the victims represented the most expert and experienced seamen in the kingdom; also their employment was so highly necessary, useful, and lawful as to demand imperatively all the protection the law of the land could possibly afford them."—*Extract from Letter to the President of the Board of Trade, 2nd April, 1879.*

Having by the above examples demonstrated the impracticable nature of the suggestion contained in extracts 1 and 2, I will quote a passage from the preface to 'Orion,' and show the impossibility of giving effect to it by legislation, unless Art. 15 of

the present Rules is reversed, and *all* sailing vessels ordered to keep out of the way of steamers.

"Inasmuch as smacks, luggers, and barges, which represent an immense and important home trade, are dependent upon wind for their motive power, it happens mostly that they could not get out of the way of a steamer, even if they had an indication beforehand on which side the steamer desired to pass, so that steamers must, as at present, either be put to the inconvenience of losing a minute by stopping, or they must deliberately drown the crews of these small vessels. The general impression has hitherto prevailed that everyone had equal rights on the Queen's highway, and that the lives of smacksmen were more valued by the nation than the saving of a few minutes of time to steamship owners and pilots, an impression which will probably remain until an Act of Parliament is passed that shall clearly define the tonnage of a *large vessel* which shall enjoy the exclusive privilege of drowning Her Majesty's subjects with impunity, and the tonnage of a *small vessel* which it will be lawful to run down without incurring liability. Without these definitions the law could not be administered, and with them the Rule of the Road would be plunged into a state of inextricable confusion."

Considering whence these suggestions emanate, the way out of this awkward dilemma is provided for in a manner still more remarkable by extracts 3, 4, and 5, wherein if the *then* assessors are not reproached for having administered the law as they found it, and present and future assessors encouraged to take more enlightened views, and to strain the law in favour of large steamers as against small vessels, our language has failed to give expression to the author's meaning. This mode of administering justice might possibly be regarded by the owners of steamships as a step "towards reform and relief in the direction indicated," but it is to be hoped that gentlemen in the service of an important government department,

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apart from the fact of its being a paternal government, are not likely to interpret the law with partiality, whatever their previous employment. If large steamers only ran down small vessels it might appear to gentlemen of advanced opinions as if only small vessels were in fault; but, in fact, large steamers exhibit a commendable spirit of impartiality and fair play by running down each other, so that the blame for these disasters may be properly attributed to the causes I have pointed out here, and in the publications to which I have presumed to direct attention.

In reference to extract 6.—During recent years several large steamships have been sunk in recklessly attempting to steam across the bows of sailing ships of 1000 tons and upwards, by which many hundred lives have been lost. Not only for the safety of sailing ships, which are in a large majority,\* but evidently for their own protection, it is highly important that the captains and officers of steamships should have a practical acquaintance with the capabilities of ships under canvas, having but a limited power of manœuvring or of arresting their progress in a case of difficulty, and which, for the express purpose of preventing doubt and confusion in the minds of captains of steamers, are by law compelled to hold their course.

On the supposed difficulties of stopping steamers nothing that can be said by apologists for the present reckless system of steaming is worthy of a moment's

\* About five to one in England, and a larger proportion abroad.

consideration, for if the unhandiness which some persons are pleased to attribute to them is a sufficient reason why they should not be expected to stop in broad waters to avoid the risk of collision, the same reason would be tenfold more powerful if urged in favour of a proposition to exclude them altogether from such narrow and crowded waters as the Pool, the Tyne, the Mersey, and the Clyde. The fact that they are well able to manœuvre in and out of docks, and to navigate these crowded waters without running down everything in their course, or without drifting ashore or across the tiers of vessels they are compelled to pass, is in itself sufficient proof that the difficulty is imaginary. Such a stoppage as would in the majority of cases prevent a collision is made by scores of steamers off Gravesend daily to embark or to land pilots and passengers, and this without any inconvenience to themselves or to others. Seeing, then, that they can stop easily enough for any purpose that suits their convenience, why should imaginative gentlemen go out of their way to suggest a difficulty about stopping in obedience to Art. 16?

In the pages of a leading journal I once read some remarks—undoubtedly prompted by an advocate of the disastrous practice of attempting to steam out of difficult positions at high speed—which induce me to make further observations upon this important subject. The remarks I refer to were extracts from the reports of scientific men, with comments in support of them, to prove that the rudder refuses to act properly when the engines of the



screw are reversed. But this element of unhandiness, which is made the excuse for cutting each other down when they endeavour to avert a collision that is already inevitable, and which is stated to vary with every alteration in the immersion and form of the screw, only strengthens the argument in favour of my suggestion, that they should stop and reverse at the first appearance of a doubt—which, I cannot too often repeat, invariably means danger—and bring the rudder into play when they are deliberately going ahead again after stopping. No one in his senses can suppose that stopping and reversing at the distance of a hundred yards, after the Steering Rule has failed, and a collision is seen to be inevitable, can be of any use, excepting to be able to swear in Court that the engines were stopped; but this is the only sort of trial that Art. 16 has hitherto had. Is it, or is it not, a fact that screw steamers successfully navigate intricate and narrow waters, where they are continually stopping and then going ahead again—that they successfully manœuvre in and out of docks, berth themselves alongside of wharfs and jetties, and even perform, with admirable precision, the difficult operation of mooring themselves to buoys in strong tidal waters, such as Gravesend, Dartmouth, and Plymouth? If they do, it is inconceivably ridiculous, nay, more, it argues profound ignorance, or worse, on the part of those who persist in saying they cannot stop in the open sea and in broad reaches to avoid drowning passengers and crew, and wrecking valuable property.

If the relatives of the drowned were able successfully to sue shipowners, as they do railway companies, these frivolous objections would soon disappear, and Art. 16 would at once acquire the importance I have assigned to it.

To facilitate in rivers and narrow channels the traffic of steamships and steamtugs with ships in tow, I should propose that, besides whistling as they do now simply to warn a vessel of their approach, they shall also by day wave a white flag, or by night exhibit a white light, over the side on which they desire to pass; provided always that nothing shall exonerate them from their liability to stop and avoid a vessel that is dependent upon wind for its motive power, which, either for want of wind or on account of the vicinity of other steamers or sailing vessels, may be unable to alter her course, however desirous of doing so.

“As the collisions which involve a serious loss of life occur at sea as a rule, and in rivers only exceptionally, it would seem more reasonable that the attempt should first be made to improve the Rule of the Road at Sea, and that modifications to meet exceptional cases should be considered afterwards.”

“If, as I recommend, the duty of stopping their engines immediately they failed to perceive their way clear to proceed without risk of collision could be enforced upon steamers, safety to life and property would be secured; since under circumstances of doubt and difficulty the danger of a fatal misunderstanding having passed with the temporary stoppage of the vessels, both would deliberately proceed to take the course least likely to produce a collision.”

“If this cautious system—which is as strictly in accordance with common sense as the present system is opposed to it—were advocated officially in a new set of instructions upon the Rule of the Road, and were carefully instilled into the minds of the rising generation of steam navigators, collisions would decline in number

and severity as rapidly as they have hitherto increased, *and will continue to increase*, while the present system is not discountenanced."  
—*Extracts from Letter to the President of the Board of Trade, 2nd April, 1880.*

Should nothing effectual be done to prevent these casualties simply because gentlemen in authority are wedded to a system of rapid steaming at any cost, then at the relation of every fresh horror resulting from needless collisions the blood of the unfortunate victims will be justly laid at the door of those who had the power to prevent such disasters—and would not exercise it.

I cannot imagine how in a great maritime nation, which seems to be ever striving in the direction of humanity and economy, anyone should feel that this is a matter in which he is not concerned. Ordinarily, when the assistance of the public is sought for carrying out a humane object, a large pecuniary sacrifice is demanded. But in this instance, the exceptional feature of the case is that humanity and economy are intimately connected, and that in preventing a needless loss of life, and the miserable sorrow in families which infallibly accompanies it, there must also be a saving of several millions sterling—now as absurdly wasted as if it were taken from the vaults of the Bank of England and cast into the sea. Is there from the highest to the lowest a family in the country which at some time or other has no cause to be anxious about a relative or a friend at sea? Yet it is a fact that by the multiplication of swift steamers, and such mischievous ideas as are

being instilled into the minds of the rising generation of steam navigators, the dangers of the sea are increasing every year.

If my suggestions are ignored now, they will be acted upon some day; since, as in the case of "trains," no other mode of preventing collisions is possible than to stop the vessel for a few minutes in cases of doubt. Nor is it probable that any effectual mode of signalling will be thought of that is less expensive or more simple than a flag, shutter, ball, or cone, extended over the side from the "bridge"—or hoisted to a yard-arm—by day; or a lantern shipped at the height of three or four feet—or hoisted to a yard-arm—over the Red or Green by night, on the side the steamer desires to pass. I have suggested that the signals shall be White, because the same signal would do for either side; but whatever the colour, or colours, adopted, the principle would be the same.

As two-thirds of these accidents occur in clear weather, it follows that, in the majority of cases, the signals could be exchanged at such a distance as to obviate the inconvenience of stopping at all; but supposing the weather to be too thick to enable them to arrive at an understanding at a distance, surely no one in his senses will dispute the advantage of compelling them by law to approach each other cautiously until they can.

In the meantime money will continue to be wasted at the average rate of 200,000*l.* per month, and life to be drained by dribblets—as in the case of

the five pilots recently drowned by a steam collier outside the Isle of Wight—until another horror equal in magnitude to that of the 'Princess Alice,' the 'Strathclyde,' or the 'Northfleet,' by which perhaps many families of distinction will be plunged into mourning, will arouse a feeling of indignation in the public mind that will cause the present apathy to be deplored, and measures to be hastily adopted more stringent and, perhaps, less reasonable than those now suggested, and which I have presumed to recommend, alike in the interests of shipowners and of all who directly or indirectly are concerned in a question which it is a reproach to a nation, having such immense interests afloat, should be longer ignored.

Seeing that it is impossible to estimate correctly the distance of bright lights, on account of their distance seeming to vary with every change in the condition of the atmosphere, suggestions are also made in 'Orion,' under the head of "Lighthouses," by which they shall warn a vessel of her approach to within a radius of one, two, or three miles, as may be deemed desirable. If my suggestions were ascertained to be practicable and comparatively inexpensive, as I have been assured by one of the first lighthouse builders in the kingdom they are, such mistakes as led to the fatal stranding of the 'Schiller' at Scilly and the 'European' at Ushant would be impossible. The saving in strandings alone would cover the outlay many times over in a single year, as the loss from this cause is, I believe, scarcely, if any,

less than by collisions—or together, equal to a sum of about five millions sterling!

In regard to the book, ‘Observations on the Rule of the Road at Sea,’ to which I have been compelled to make frequent reference, considering that its circulation has been permitted *without official remonstrance* for more than two years, I would venture to suggest the purchase of the copyright by the Government at a full and fair valuation; a transaction which could not fail to secure the unqualified approval of all who know the enormous costliness of the greater collisions, and the atrocious cruelty of such catastrophes as those to which I have more specifically referred—for which, however unintentional on the part of the author, the teaching it contains is unhappily responsible. Also, considering the great inconvenience occasioned to the Government and the public—of which abundant proof could be furnished if it were necessary—it would be a wise resolution, henceforth, to prohibit paid officials of the Government, *unofficially* and *irresponsibly*, expressing their opinions in print on subjects connected with the departments in which they serve, excepting by permission previously obtained from those who should be responsible for such opinions in Parliament.

Undoubtedly the whole subject—including an authorized interpretation of the Rule of the Road to be used in nautical schools—is one to be dealt with by a strong committee of practical men, upon which every class should be represented according to the magnitude of its interests.

## REGULATIONS FOR PREVENTING COLLISIONS AT SEA.

### STEERING AND SAILING RULES.

ART. 13.—If two ships under steam are meeting end on, or nearly end on, so as to involve risk of collision, the helms of both shall be put to Port, so that each may pass on the Port side of the other.

ART. 14.—If two ships under steam are crossing so as to involve risk of collision, the ship which has the other on her own Starboard side shall keep out of the way of the other.

ART. 15.—If two ships, one of which is a sailing ship, and the other a steam ship, are proceeding in such directions as to involve risk of collision, the steam ship shall keep out of the way of the sailing ship.

ART. 16.—Every steam ship, when approaching another ship so as to involve risk of collision, shall slacken her speed, or, if necessary, stop and reverse; and every steam ship shall, when in a fog, go at a moderate speed.

### AIDS TO MEMORY, IN RHYME.

By THOMAS GRAY, A.I.N.A., *Assistant Secretary, Board of Trade.*

#### *Two Steam Ships Meeting.*

Meeting Steamers do not dread,  
When you see Three Lights a-head—  
Port your helm, and show your RED.

#### *Two Steam Ships Passing.*

GREEN to GREEN, or RED to RED—  
Perfect safety—Go a-head!

#### *Two Steam Ships Crossing.*

If to your Starboard RED appear,  
It is your duty to keep clear;  
To act as judgment says is proper—  
To Port—or Starboard—Back—or Stop her.  
But when upon your Port is seen  
A Steamer's Starboard light of GREEN,  
There's not so much for you to do,  
The GREEN light must keep clear of you.

#### *General Caution.*

Both in safety and in doubt  
Always keep a good look-out.  
In danger, *with no room to turn*,\*  
Ease her!—Stop her!—Go a-stern!

\* As at least 90 per cent. of the collisions involving serious loss of life occur where there is plenty of room, and even many miles to spare, it follows that Article 16, which is an important Rule for preventing collisions at sea, is reduced to a nullity by this proviso.

## REGULATIONS FOR PREVENTING COLLISIONS AT SEA.

### STEERING AND SAILING RULES.

ART. 13.—Every steam ship when approaching another ship so as to involve risk of collision shall slacken her speed, or, if necessary, stop and reverse, and every steam ship shall, when in a fog, go at a moderate speed.

ART. 14.—If two ships under steam are meeting end on, or nearly end on, so as to involve risk of collision, the helms of both shall be put to Port, so that each may pass on the Port side of the other.

ART. 15.—If two ships under steam are crossing so as to involve risk of collision, the ship which has the other on her own Starboard side shall keep out of the way of the other.

ART. 16.—If two ships, one of which is a sailing ship, and the other a steam ship, are proceeding in such directions as to involve risk of collision, the steam ship shall keep out of the way of the sailing ship.

### AIDS TO MEMORY, IN RHYME.

#### 1.—*Two Steam Ships Meeting unexpectedly.*

Meeting Steamers you should dread  
When you see Three Lights a-head—  
Sound your whistle, Stop her dead! \*  
Port your helm, and show your RED.

#### 2.—*Two Steam Ships Meeting nearly end on.*

GREEN to GREEN, or RED to RED—  
Signals answered—Go a-head.

#### 3.—*Two Steam Ships Crossing.*

If to your Starboard RED appear,  
It is your duty to keep clear;  
To act as judgment says is proper—  
To Port—or Starboard—Back—or Stop her.  
But when upon your Port is seen  
A Steamer's Starboard light of GREEN,  
There's not so much for you to do,  
The GREEN light must keep clear of you.

\* A proper term as applied to the engines. The helm would be ported during the process of stopping the ship, which takes time, or when going a-head again after stopping, according to circumstances.



# ORION;

OR,

## HOW I CAME TO SAIL ALONE IN A NINETEEN-TON YACHT.

By R. T. McMULLEN,

*Author of 'DOWN CHANNEL.'*

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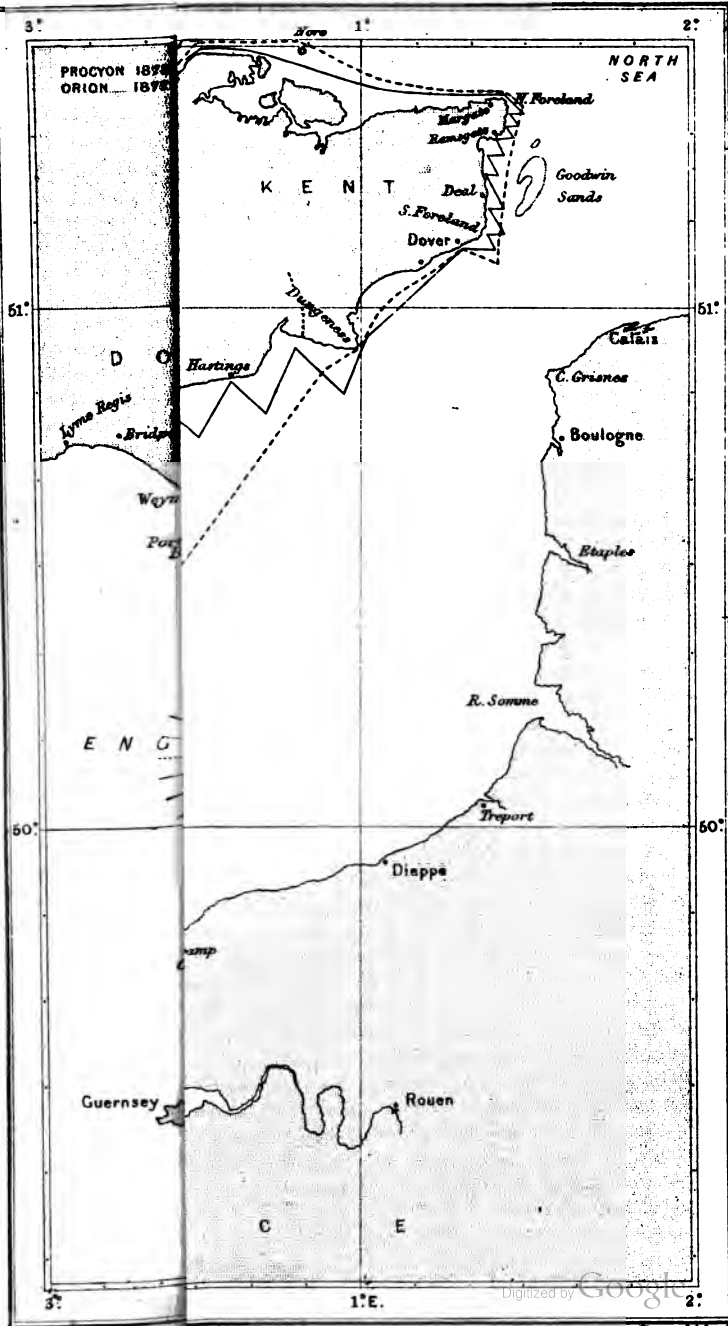
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The simple and unadorned narrative which the author gives in the little volume before us will undoubtedly be read with interest,





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